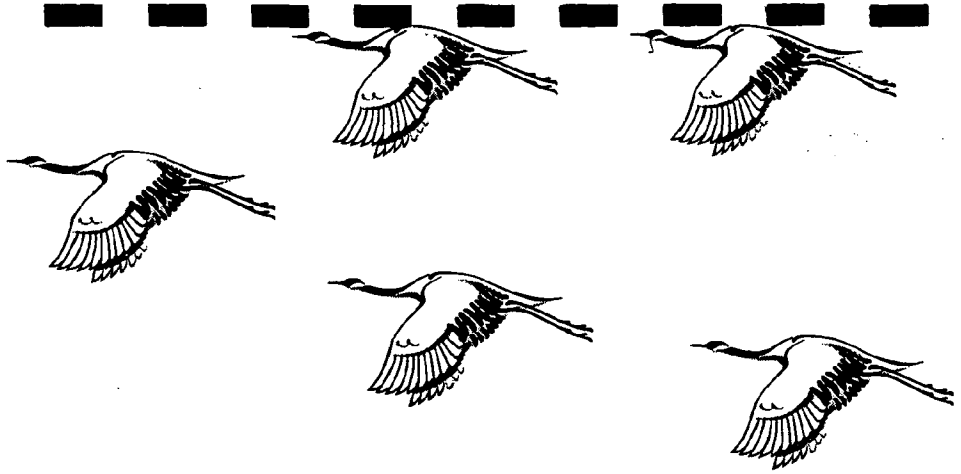


The

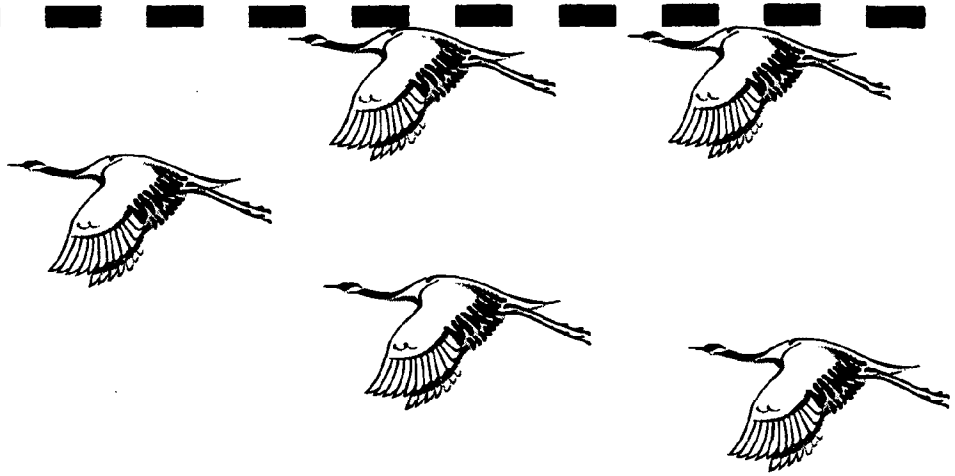
City of

Orange Beach

Comprehensive Plan

Adopted by the Planning Commission
March 12, 1996

Prepared By
The South Alabama Regional Planning Commission



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POPULATION AND ECONOMY

GOAL: Promote desirable residential environments and sound commercial developments.

The purpose of this section is to provide an overview of the City's present and future population and economy.

Objective:

Maintain the quality of life that has been created in order to ensure that Orange Beach remains a desirable residential community and that the City continues to be sensitive to the changing needs of the community.

POPULATION

Population Estimates

The 1990 U.S. Census revealed Orange Beach's year round population was 2,253, which ranks seventh among Baldwin County's eleven incorporated areas. Orange Beach's 1990 population represented over 2 percent of the County's total 98,280 population. The U.S. Census estimates that Orange Beach's population in 1992 was 2,424, an increase of 7.6 percent from 1990. Table 1 summarizes the main factors contributing to this population growth between the years 1990 and 1992.

TABLE 1

SUMMARY OF POPULATION GROWTH FACTORS
ORANGE BEACH
1990-1992

1990 Population	2,253
Total Births	32
Total Deaths (Minus)	- 34
Natural Increase (Births - Deaths)	- 2
Estimated 1992 Population (U.S. Dept. of Census)	2,424
Population Gain from Migration	173

Source: U.S. Dept. of Census
Alabama Department of Vital Statistics
South Alabama Regional Planning Commission

Age

The 1990 U.S. Census of Population indicated that the median age was between 45 and 49 years old. Approximately 25.7 percent of the population was between the ages of 25 and 44. This group is generally referred to as the most economically productive age group. The age group between 5 and 24 comprised 17.1 percent of the total population. Senior citizens, those persons that are 65 years and older, comprised 21.6 percent of the total population. It is interesting to note the unique population distribution. The City's older population, 55+ years old, was equally split between males and females. Figure 1 illustrates the percent distribution of population by sex and age groups in Orange Beach and Baldwin County.

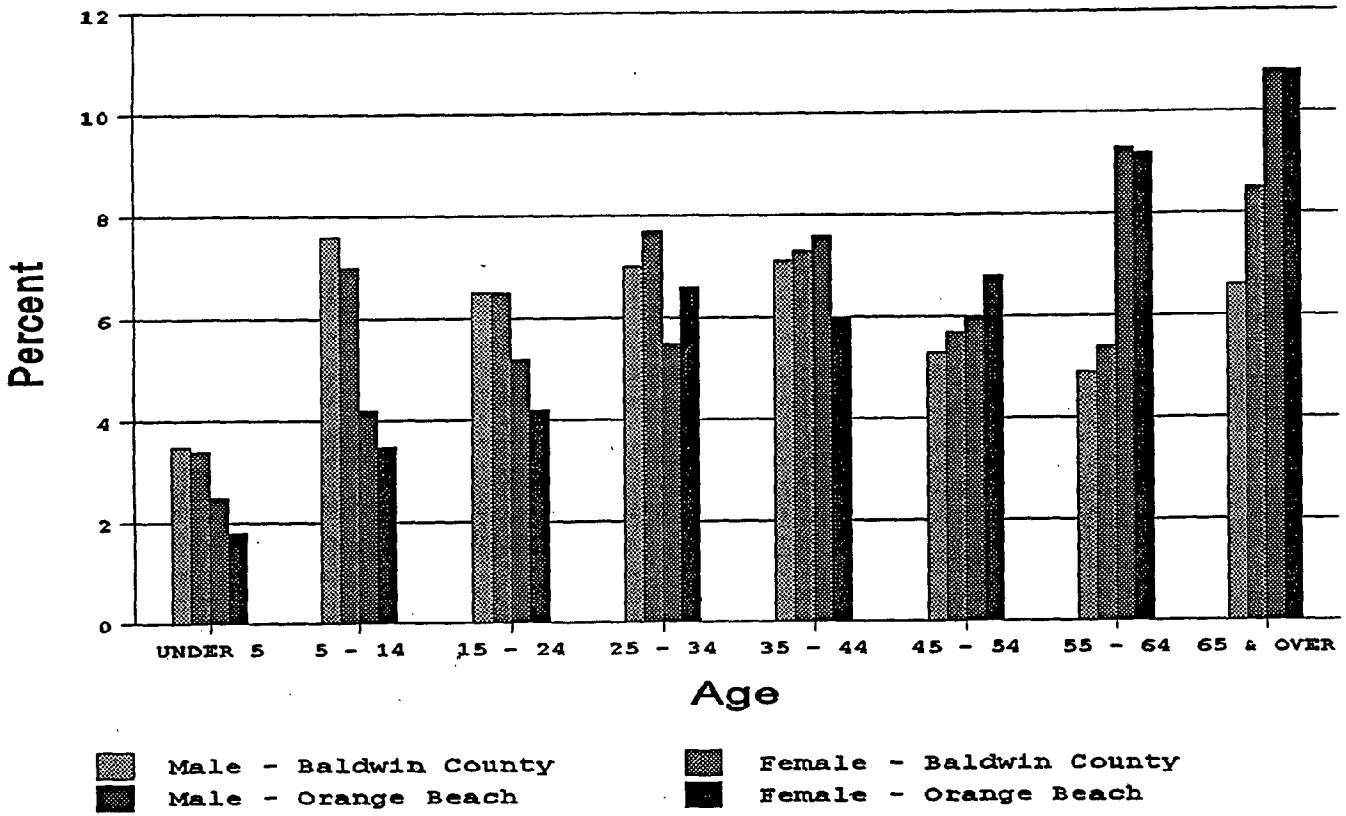
Sex

Females represented 49.0 percent of the population, of which 34.2 percent were in the childbearing age groups between 15 and 44 years of age, and 45.6 percent were between the ages of 45 and 69. Males represented 51 percent of the total population, with 19.4 percent of all males under 22 years of age. The majority of the male population was between the ages of 22 and 74, totaling 75.5 percent.

Race

In 1990, the White population of Orange Beach totaled 2,241 or 99.5 percent of the total; 0.5 percent of the population was Black, American Indian, and Filipino.

FIGURE 1
PERCENT DISTRIBUTION OF POPULATION BY SEX AND AGE GROUP
ORANGE BEACH AND BALDWIN COUNTY
1990



Source: *U.S. Census, 1990, Summary Tape File 3*

Marital Status

The marital status of Orange Beach residents who were 15 years or older in 1990 was as follows: 1,391 or 70.2 percent were married; 13.8 percent had never been married; 7.8 percent were divorced; 7.7 percent were widowed; and, 0.5 percent were separated.

Households

There were 1,036 households in Orange Beach in 1990 with 2.17 persons per household. Over 48.8 percent of the households contained two persons. Another 25 percent contained only one person. The remaining households contained 3 (14.1 percent), 4 (7.4 percent) and 5 or more (4.1 percent) persons, respectively, as shown in Table 2.

Just over 70.7 percent of all households were classified as family households with the majority of these being married couple families. Of these family households, only 25.0 percent had children who lived with them. Non-family households comprised the remaining 29.3 percent of all households. See Table 3.

TABLE 2

HOUSEHOLDS BY PERSONS IN HOUSEHOLDS ORANGE BEACH 1990

Persons	Households Number	Percent
1 Person	265	25.6
2 Persons	506	48.8
3 Persons	146	14.1
4 Persons	77	7.4
5 Persons	32	3.1
6 Persons	7	0.7
7 or More Persons	3	0.3
TOTAL	1,036	100.0

Source: U.S. Census, 1990, Summary Tape File 3

TABLE 3

PERSONS BY HOUSEHOLD TYPE AND RELATIONSHIP
ORANGE BEACH
1990

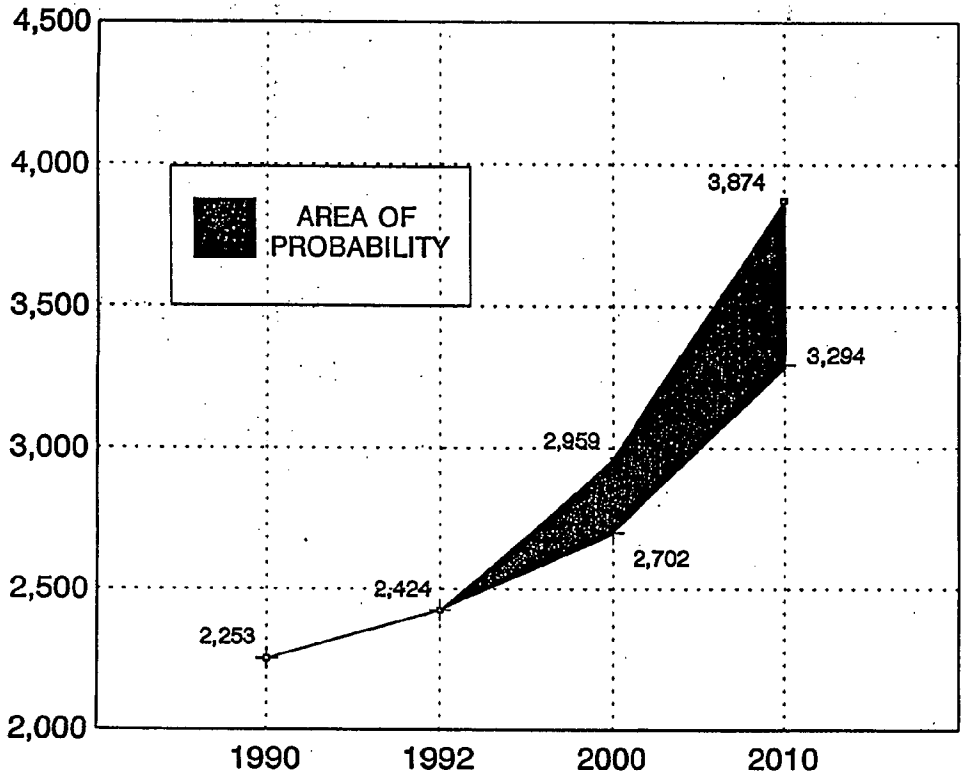
Household Type/Relationship	Persons	Percent
Total Population in Households	2,253	100.0
In Family Households	1,90	70.7
Householder	732	
Spouse	686	
Other Relatives	472	
Non-Relative	14	
In Non-Family Households	349	29.3
Householder Living Alone	265	
Householder Not Living Alone	39	
Non-Relatives	45	
In Group Quarters	0	0

Source: U.S. Census, 1990, Summary Tape File 3

Population Projections

It is extremely difficult to project population with a high degree of accuracy given that population data is generally only collected every ten years. This difficulty is further compounded by the fact that Orange Beach was incorporated in the interim time frame. As such, it is preferable to provide high and low projections with the values in-between being defined as an area of probability or the interval wherein the future population is expected to fall. Since Orange Beach was incorporated in 1984, the larger or high population projections are based on straight-line calculations using 1960 through 1990 data for Baldwin County and applying the results to the latest population figure for Orange Beach (U.S. Census estimates for 1992). This results in the projections of 2,959 for year 2000 and 3,874 for year 2010. The low projection values were also derived from 1960-1990 Baldwin County data, but adjusted according to residential building permits issued; this results in 2,702 for year 2000 and 3,294 for year 2010. Figure 2 provides an illustration of the area of probability with regard to the City's permanent or year-round population projections.

FIGURE 2
HISTORIC AND PROJECTED YEAR-ROUND POPULATION
ORANGE BEACH
1990-2010



Source: *U.S. Census, 1990*
Projections, South Alabama Regional Planning Commission

Seasonal Population

Orange Beach experiences a large seasonal population influx. The primary attractions are the white sand Gulf Coast beaches and water-related activities. Gulf Coast Area Chamber of Commerce reported in their *Community Profile and Business Data for Alabama Gulf Coast (1994)* that the seasonal population for 1988, 1998 and 2008 was and is estimated to be 18,236, 25,836 and 32,484, respectively. Calculations for seasonal population projections for year 2000 and 2010 occupancy rates for hotel/motel indicates that the summer months (June, July and August) are the peak visitation months, followed by spring (March, April and May), fall (September, October and November) and lastly, winter (December, January and February). It is assumed that spring and summer visitors have a shorter length of stay (3 to 7 days) than those visitors in fall and winter, whose stay may extend over several months.

It should be noted here that Orange Beach's year-round population was an estimated 2,424 in 1992. Table 4 illustrates the permanent and seasonal population occupying hotels and motels by month in 1994.

Information is lacking regarding seasonal population vacancy rates of condominiums. The Alabama Gulf Coast Convention and Visitors Bureau is currently working with a marketing agency to determine this vacancy rate and other formation. The City must provide facilities and services to accommodate all of the population, whether they are year-round residents or seasonal/tourist residents. Figure 3 illustrates seasonal population for Orange Beach in 1994.

TABLE 4

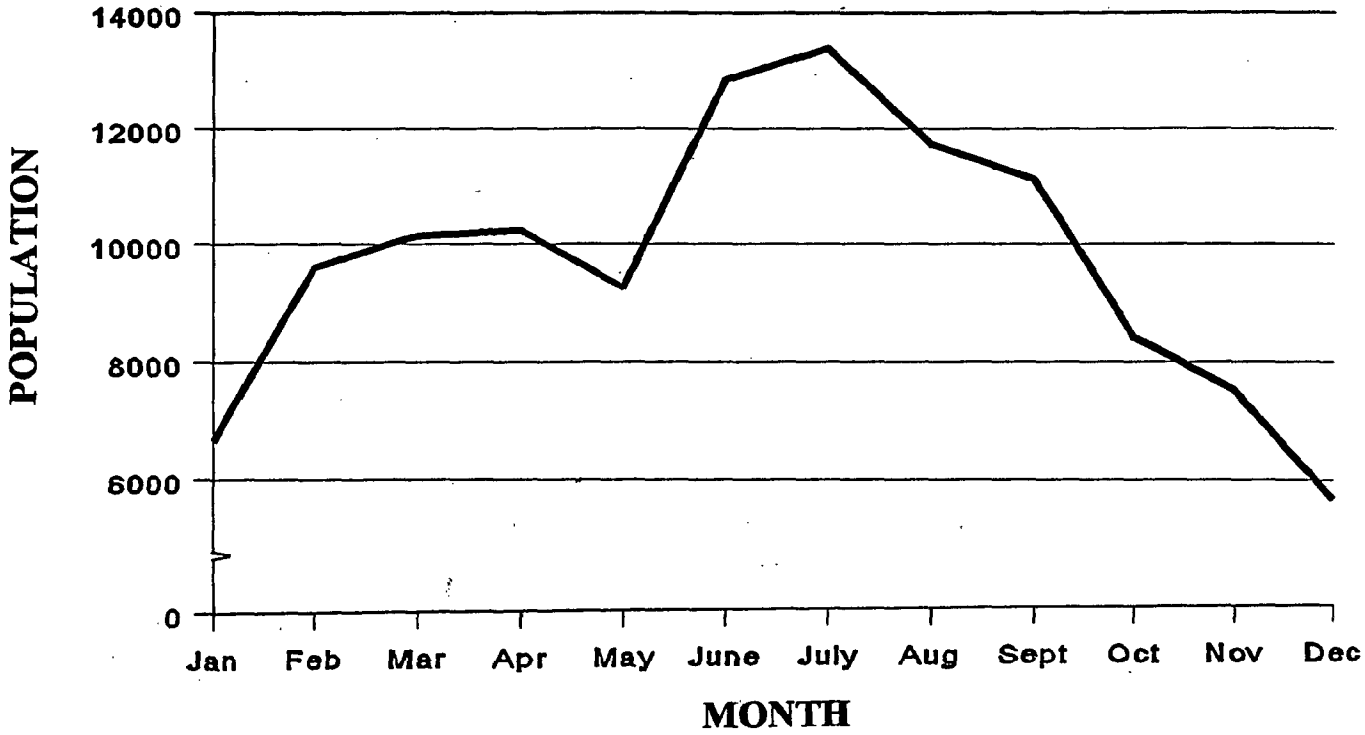
PERMANENT AND SEASONAL POPULATION OCCUPYING HOTELS & MOTELS
CITY OF ORANGE BEACH
1994

Month	Permanent Population Units	Permanent Population Persons	Percent Seasonal Units Occupied	Number Seasonal Units Occupied	Seasonal Population 2.0-2.5 Persons per Unit	Permanent and Seasonal Population
January	1,288	2,795	39.4	1,937	3,874	6,669
February	1,288	2,795	69.2	3,401	6,802	9,597
March	1,288	2,795	74.7	3,672	7,344	10,139
April	1,288	2,795	75.7	3,721	7,442	10,237
May	1,288	2,795	65.8	3,234	6,468	9,263
June	1,288	2,795	81.8	4,020	10,050	12,845
July	1,288	2,795	86.2	4,237	10,593	13,388
August	1,288	2,795	72.7	3,573	8,933	11,728
September	1,288	2,795	67.7	3,328	8,320	11,115
October	1,288	2,795	57.1	2,807	5,614	8,409
November	1,288	2,795	48.8	2,399	4,798	7,593
December	1,288	2,795	29.4	1,445	2,890	5,685
Peak Population	1,288	2,795	86.2	4,237	10,593	13,388

Source: *1990 U.S. Census of Population and Housing, STF-3A*
City of Orange Beach Building Inspections

FIGURE 3

PROJECTED SEASONAL POPULATION
ORANGE BEACH
1994



Source: *Community Profile and Business Data for Alabama Gulf Coast (1994)*

ECONOMY

Objective: Encourage commercial development to be compatible and complimentary to the residential community and to be sensitive to the natural and environmental resources.

Education

An important aspect of any city's economy is the educational attainment of its citizens. This has a direct effect upon the income and types of employment which exist in a community. Orange Beach is a tourist/retirement community, therefore the City's economy is tied to tourism and its related services. Generally in a tourist-based economy, the education levels of citizens are not as crucial a factor as in other communities.

As Table 5 illustrates, Orange Beach is generally above Baldwin County in educational attainment for persons 25 years old and over. While 41.4 percent of persons 25 years old and over in Baldwin County have had some education beyond the high school level. Generally, attainment of higher educational levels by Orange Beach's citizens exceeds that of the County's. Orange Beach exhibits a 50.2 percent attainment for this educational level.

TABLE 5

EDUCATIONAL ATTAINMENT FOR PERSONS 25 YEARS OLD AND OVER
ORANGE BEACH AND BALDWIN COUNTY
1990

	Orange Beach		Baldwin County	
	No. of Persons	Percent	No. of Persons	Percent
Less than 9th grade	61	3.2	6,386	9.9
9th to 12th grade, no diploma	257	13.4	10,923	16.9
High school graduate (includes equivalency)	636	33.2	20,544	31.8
Some college, no degree	506	26.4	12,838	19.9
Associate degree	74	3.9	3,062	4.7
Bachelor's degree	264	13.8	7,079	10.9
Graduate or professional degree	116	6.1	3,791	5.9
TOTAL	1,914	100.0	64,623	100.0

Source: U.S. Census, 1990, Summary Tape File 3
Calculations, South Alabama Regional Planning Commission

Income

In reviewing the economy, the population's buying power or its personal wealth was examined. It is one of the factors which is reflected in improved facilities and living standards. It is also an indicator of the deficiencies in these same units of society. In a tourist/resort economy, the influence of income is diluted. Therefore decisions on buying land, houses, retail goods and services are not only dependent upon the income of the populace, but also are influenced by tourist/resort involvement. Such decisions, in turn, influence the various types of land use which prevail in such a community.

Table 6 shows that in Orange Beach household income is, in general, higher than in Baldwin County. The median household income level is significantly higher as demonstrated in 1989 when the median household income in Orange Beach was $30,445 compared to $25,712 in Baldwin County. Of all households in Orange Beach, just over 12 percent had incomes less than $9,999. This is somewhat less than the percent of households in the County (16.9%). In the upper income ranges, over 21.5 percent of Orange Beach households earned $50,000 or more, compared to 18.1 percent of the County's households.

Per capita income is a useful and comparative tool when determining a community's buying power. In 1989, the per capita income for Baldwin County residents was $12,275. In the City of Orange Beach, the per capita income was $16,512.

TABLE 6

HOUSEHOLD INCOME
ORANGE BEACH AND BALDWIN COUNTY
1989

Income	Orange Beach Households	Orange Beach Percent	Baldwin County Households	Baldwin County Percent
Less than $5,000	40	3.9	2,549	6.9
$ 5,000 - $9,999	88	8.5	3,726	10.0
$10,000 - $14,999	99	9.5	3,995	10.8
$15,000 - $19,999	80	7.7	3,924	10.6
$20,000 - $24,999	89	8.6	3,853	10.4
$25,000 - $29,999	109	10.5	3,319	8.9
$30,000 - $34,999	104	10.0	2,750	7.4
$35,000 - $39,999	80	7.7	2,471	6.6
$40,000 - $49,999	124	12.0	3,827	10.3
$50,000 - $59,999	91	8.8	2,480	6.7
$60,000 - $74,999	65	6.3	2,041	5.5
$75,000 - $99,999	36	3.5	1,236	3.3
$100,000 - $124,999	19	1.8	457	1.2
$125,000 - $149,999	3	0.3	179	0.5
$150,000 or more	9	0.9	319	0.9
TOTAL	1,036	100.0	37,126	100.0
Median Household Income in 1989:		$30,445		$25,712

Source: U.S. Census, 1990, Summary Tape File 3

Table 7 shows 1989 per capita income for the eleven incorporated areas and Baldwin County, in which Orange Beach ranked third.

TABLE 7

PER CAPITA INCOME
BALDWIN COUNTY
AND MUNICIPALITIES
1989

Municipality	Per Capita Income 1989
Daphne	$17,471
Gulf Shores	17,414
Orange Beach	16,512
Fairhope	14,987
Baldwin County	12,275
Silverhill	10,314
Loxley	9,741
Robertsdale	9,531
Foley	9,498
Summerdale	9,470
Bay Minette	8,901
Elberta	8,480

Source: U.S. Census, 1990, Summary Tape File 3

Poverty

In 1990, there were 193 households with persons determined by the U.S. Census to have incomes below the poverty level. This represented 8.6 percent of Orange Beach's total population, as shown in Table 8.

Labor Force

Employment typically generates population growth as well as provides a source of income for the purchase of homes, retail goods and local services. In addition, the businesses which provide employment generate revenues and, in turn, support governmental services.

TABLE 8

PERSONS WITH
INCOME BELOW POVERTY LEVEL
ORANGE BEACH
1989

	No.	Percent
5 years & under	12	6.2
6-11	13	6.7
12-17	14	7.3
18-64	126	65.3
65-74	13	6.7
75 years & over	15	7.8
TOTAL	193	100.0

Source: U.S. Census, 1990, Summary Tape File 3

Civilian Labor Force

Orange Beach's civilian labor force, like that of other Baldwin County municipalities, has relied primarily on the private sector for employment.

The labor force of an area is, by definition, persons 16 years old or over, who are employed or are actively seeking employment. In 1990, the City's labor force totaled 1,105, representing 75.3 percent of the City's population between 16 years and 65 years old. Table 9 shows civilian labor force by sex for Orange Beach and Baldwin County.

Occupation and Class of Worker

As shown in Table 10, the majority of Orange Beach's 1990 labor force was employed in two major occupational groupings. They were technical sales and administrative occupations (37.0%) and managerial and professional specialty occupations (23.7%).

TABLE 9

CIVILIAN LABOR FORCE BY SEX
ORANGE BEACH AND BALDWIN COUNTY
1990

Sex/Labor Force Status	Orange Beach		Baldwin County		Orange Beach as a Percent of County
	No.	Percent	No.	Percent	
Civilian Labor Force	1,105	100.0	45,480	100.0	2.4
Employed	1,062	96.1	43,005	94.6	2.5
Unemployed	43	3.9	2,475	5.4	1.7
Not in Labor Force	846	N/A	30,237	N/A	2.8
Male	610	100.0	24,838	100.0	2.5
Employed	587	96.2	23,796	95.8	2.5
Unemployed	23	3.8	1,042	4.2	2.2
Not in Labor Force	375	N/A	11,183	N/A	3.4
Female	495	100.0	20,642	100.0	2.4
Employed	475	96.0	19,209	93.1	2.5
Unemployed	20	4.0	1,433	6.9	1.4
Not in Labor Force	471	N/A	19,054	N/A	2.5

N/A - Not applicable

Source: U.S. Census 1990, Summary Tape File 3

These two occupational groupings represented 61.7 percent of Orange Beach's employed labor force, but only 52.1 percent of the County's employed labor force. Sales occupations was the largest occupational sub-group and executive, administrative and managerial occupations was the second largest. Both represent *white collar* positions supporting the City's resort economy and retirement community. In 1990, the largest percentage of the County's labor force was employed in technical sales and related support occupations (29.8%), followed by managerial and professional specialty occupations (22.3%).

TABLE 10
OCCUPATION OF EMPLOYED PERSONS 16 YEARS OLD AND OVER
ORANGE BEACH AND BALDWIN COUNTY
1990

	Orange Beach		Baldwin County	
	Number	Percent	Number	Percent
Managerial and Professional Specialty Occupations				
• Executive, administrative & managerial occupations	156	14.7	4,745	11.0
• Professional specialty	95	9.0	4,843	11.3
Technical, Occupational Sales & Administrative Support Occupations				
• Technicians & related support occupations	57	4.4	1,224	2.8
• Sales occupations	198	18.6	5,954	13.8
• Administrative support occupations including clerical	149	14.0	5,663	13.2
Service Occupations				
• Private household occupations	5	0.5	261	0.6
• Protective service occupations	18	1.7	538	1.3
• Service occupations, except protective & household	137	12.9	4,777	11.1
Farming, Forestry & Fishing Occupations	40	3.8	1,531	3.6
Precision Production, Craft & Repair Occupations	116	10.9	5,821	13.5
Operators, Fabricators & Laborers				
• Machine operators, assemblers & inspectors	17	1.6	3,549	8.3
• Transportation & material moving occupations	51	4.8	2,491	5.8
• Handlers, equipment cleaners, helpers & laborers	33	3.1	1,608	3.7
TOTAL	1,062	100.0	43,005	100.0

Source: U.S. Census, 1990, Summary Tape File 3

Table 11 indicates that Orange Beach's and Baldwin County's working populations were primarily composed of private wage and salary workers, at 67.6 percent and 72.9 percent, respectively. Self-employed workers represented 15.3 percent of Orange Beach's employed persons, which was much higher than the County's 8.5 percent, again reflecting the resort/retail orientation of the City's economy.

TABLE 11

WAGE AND SALARY COMPOSITION OF EMPLOYED PERSONS 16 YEARS OLD AND OVER ORANGE BEACH AND BALDWIN COUNTY 1990

	Orange Beach		Baldwin County	
	No.	Percent	No.	Percent
Private for-profit wage & salary workers	718	67.6	31,348	72.9
Private not-for profit wage & salary workers	54	5.1	2,121	4.9
Local government workers	47	4.4	2,465	5.7
State government workers	51	4.8	1,916	4.5
Federal government workers	12	1.1	1,265	2.9
Self-employed workers	162	15.3	3,638	8.5
Unpaid family workers	18	1.7	252	0.6
TOTAL	1,062	100.0	43,005	100.0

Source: U.S. Census, 1990, Summary Tape File 3

Place of Work

Approximately only 40 percent of all Orange Beach's workers 16 years old and over worked in Orange Beach, as shown in Table 12. There are several possible explanations for this: 1) the types of businesses located in Orange Beach did not employ the skills of the local labor force; and/or 2) the size of the local labor force exceeds the employment opportunities in Orange Beach.

The community's economic base is analyzed further by examining its economic structure to determine whether it was more involved with exporting its goods and services or servicing the local market.

TABLE 12

PERSONS LIVING AND WORKING IN ORANGE BEACH 1990

Living in Orange Beach:	
Work in Orange Beach	**424**
Work outside of Orange Beach	**630**

Source: ***U.S. Census, 1990, Summary Tape File 3***

Employment by Industry

Retail trade was the largest significant employment category in Orange Beach, accounting for 23.1 percent of the employed work force in 1990. See Table 13. Professional and related services was the next largest employment type (14.0%), followed by finance, insurance and real estate (12.1%)

Orange Beach's retail sector represented a larger proportion of the City's total employment than did Baldwin County's which was second largest, at 18.7 percent. The City's distribution pattern of employment by industry was not consistent with that of the County's, in which the largest employment type was manufacturing (19.3%). Professional and related services was 18.3 percent of the County's employment, the third largest category. Orange Beach's work force was concentrated heavily in the retail/service industry; its largest revenue source was generated from tourism.

TABLE 13
EMPLOYMENT BY INDUSTRY
ORANGE BEACH
1990

	Orange Beach		Baldwin County	
	Number	Percent	Number	Percent
Agriculture, forestry, & fisheries	29	2.9	1,525	3.5
Mining	2	0.2	212	0.5
Construction	100	9.4	3,464	8.1
Manufacturing, nondurable goods	31	2.9	3,923	9.1
Manufacturing, durable goods	61	5.8	4,384	10.2
Transportation	68	6.4	2,066	4.8
Communications & other public utilities	30	2.8	1,223	2.8
Wholesale trade	19	1.8	1,909	4.4
Retail trade	245	23.1	8,025	18.7
Finance, insurance, & real estate	128	12.1	2,422	5.6
Business & repair services	50	4.7	1,627	3.8
Personal services	75	7.1	1,983	4.6
Entertainment & recreation services	28	2.6	732	1.7
Professional & related services				
Health Services	54	5.1	2,614	6.1
Educational services	29	2.7	2,743	6.4
Other professional & related services	66	6.2	2,483	5.8
Public administration	47	4.4	1,670	3.9
TOTAL	1,062	100.0	43,005	100.0

Source: U.S. Census, 1990, Summary Tape File 3

Tourism

The overall economic impact of visitor expenditures is a chain effect of both direct and indirect impacts. *Direct* impacts are expenditures that pay wages, earn income and pay taxes. *Indirect* effects are more jobs, wages, salaries, income and tax revenues from the income expenditures of those *direct* recipients. The sum result is the economic impact of travelers.

Tourism has an economic impact in all areas, even extending to *traditional* service industries such as medical services, dry cleaners, etc. As a result of the increasing tourism and the permanent as well as seasonal population in Orange Beach, businesses are increasing as well. Natural resources attracted the population initially and service-based businesses have followed. It should be noted here that condominium/resort hotels have dominated the types of developments along the beach.

TABLE 14

SALES AND LODGING TAX REVENUE
CITY OF ORANGE BEACH
1989-1993

FY	Sales Tax Revenue	Percent of Total Revenue
1989	845,390	--
1990	1,273,326	53.8
1991	1,465,952	58.4
1992	1,621,708	56.5
1993	1,947,749	59.7

Source: Alabama Department of Revenue and City of Orange Beach

There is no retail center or place that provides a *sense of place* for Orange Beach residents. The lack of a retail center causes visitors to travel to neighboring communities to shop. There are strip centers that provide basics such as groceries, pharmacies and hardware, but more intense shopping patterns cause migration to other retail centers located outside the corporate limits.

The majority of businesses in Orange Beach are of retail or service trade, which are supported by the populous and tourists of the community. Orange Beach's sales tax is broken down as follows: 2.0 percent City, 2.0 percent County, and 4.0 percent State, equaling an 8.0 percent retail tax rate. The lodging tax is 3.0 percent. Table 14 describes Orange Beach's sales and lodging tax revenue for fiscal years 1989 through 1993.

Development/Construction

Along with the conventional types of employment, we cannot ignore the development and construction sector of labor force. Listed in Table 15 are the types of construction activity in Orange Beach between the years 1989 - 1994.

TABLE 15
TYPE OF CONSTRUCTION ACTIVITY

		Units
1989	Residential - Single Units	37
	Residential - Multi Units	0
	Commercial	2
	Industrial	0
	Other	43
1990	Residential - Single Units	37
	Residential - Multi Units	7
	Commercial	8
	Industrial	0
	Other	0
1991	Residential - Single Units	68
	Residential - Multi Units	137
	Commercial	24
	Industrial	0
	Other	22
1992	Residential - Single Units	58
	Residential - Multi Units	269
	Commercial	32
	Industrial	0
	Other	12
1993	Residential - Single Units	145
	Residential - Multi Units	550
	Commercial	25
	Industrial	0
	Other	20
1994	Residential - Single Units	101
	Residential - Multi Units	624
	Commercial	17
	Industrial	0
	Other	4

Source: City of Orange Beach

"Commercial" includes parking structures.
"Other" includes churches, schools, utility buildings and structures other than buildings.

Recommendations

- Throughout the planning period, Orange Beach should continue to promote beautification and conservation efforts and incorporate same into the Zoning Ordinance and Subdivision Regulations.

- Encourage commercial development to be compatible and harmonious with the residential community and environmental resources.

LAND USE

GOAL:

Efficiently manage and regulate land use to be consistent with the City's Mission Statement and more specifically with each Neighborhood Mission Statement as set forth in this document.

The purpose of this land use section is to identify and depict existing land use patterns and to set forth the physical plan for the future development of the City of Orange Beach. This section designates the appropriate location for future land uses and establishes policies regarding the location and development of all land uses.

OBJECTIVES:

- Ensure that all new and existing land uses will be adequately served by facilities, and that all site plan reviews consider the availability of public services and facilities not already committed to other development projects.
- Manage future growth and development using the City's Comprehensive Plan, Zoning Ordinance, and Future Land Use Map including revisions thereto, as a guide. The subdivision of land will be regulated subject to the City's Subdivision Regulations, and also the requirements for compatibility of adjacent land uses, including buffers between significantly different types of land uses (e.g., commercial and low-density residential) which will be regulated by the City's Zoning Ordinance.
- Continue to require, maintain and promote a safe and efficient transportation network in future developments.

- Include requirements in the City's Zoning Ordinance for non-residential land uses, as shown on the Future Land Use Map, that promote economic development while protecting the City's character and natural resources.

- Continue to eliminate land uses inconsistent with the character of the area or with the Future Land Use Map. This should be accomplished through rezoning and the requirement that all proposed site plans and subdivisions conform to the Future Land Use Map.

- Encourage the protection of natural resources from negative impacts of development activities and require that future land uses be coordinated with appropriate topography and soil conditions.

- Encourage rehabilitation of run-down areas and the removal of dilapidated structures.

Inventory and Analysis

The inventory and analysis of the existing use of land in a community is of special interest to community planning because the future development of the community will be based on strengthening the positive aspects and character of present and past land use patterns.

As stated in the preface of this document, and for purposes of future development, the City has been divided into four neighborhoods. The Mission Statement for the City and for these neighborhoods follows:

Mission Statement for the City of Orange Beach

The Comprehensive Plan promotes a city of neighborhoods featuring Traditional Neighborhood Design (TND) characteristics that enhance relaxed lifestyles and foster family values. It addresses improved mobility; creating a pedestrian oriented environment and adding some form of mass transit to lessen dependence on the automobile. It seeks to maintain Orange Beach as a Resort Destination, emphasizing water, fishing and nature related recreational activities. Provisions of the plan attract job-producing organizations to furnish diversity in employment opportunities. The natural environmental beauty of the area, including land, water, and atmosphere is preserved by the plan. Property values and marketability of homes, residences and

commercial property will be protected and enhanced through modification of existing zoning laws and by adopting specific urban design criteria. Guidelines will be created and adopted to preserve, promote, protect, and improve public health, safety, protective provisions against natural disasters, comfort, good order and appearance within the Orange Beach jurisdiction.

Mission Statement for the Romar Beach Neighborhood and the Town Center Area

The creation of a *city identity* will be accomplished by converting segments of Highway 182, the main tourist area's arterial thoroughfare, to an aesthetically-improved, collector-level boulevard. The converted portion will span a distance beginning at the western edge of the City to its intersection with Highway 161, at which point the improved portion will generally follow Highway 161 to a point perpendicular to the center of City Hall. Improvements will encompass a median, on-street parking, tree-lined sidewalks and center, and reduced speed limits. Commercial buildings on the boulevard will implement a similar urban design, defined signage, harmonizing colors, rear building parking, and revised set back parameters. The approach to the Civic Complex will highlight the City's administrative buildings, parks, museums, postal facilities and libraries. The advance to this complex will be via tree-lined streets and terminated with impressive public buildings or other eye-appealing structures.

Mission Statement for the Alabama Point/Perdido Key Neighborhoods

This neighborhood is located along Highway 182, east of the intersection with Highway 161, south of Cotton Bayou and north of the Gulf to the eastern corporate limits. This neighborhood is intended to continue developing much in the same manner as it has prior to the Plan. Hotel and condominium type development is prevalent on the south side of Highway 182 with residential development on the north. Walkways should be incorporated with the required landscaping to promote pedestrian movement.

Mission Statement for the East Orange Beach/Bear Point Neighborhood

This neighborhood is located east of Highway 161, north of Cotton Bayou and south of Wolf Bay. Promotion of Traditional Neighborhood Design (TND) is encouraged. This will continually enhance the relaxed lifestyle, foster family values while encouraging the enjoyment of the attributes which attract residents to the area and promote a pedestrian-oriented lifestyle while lessening dependency on the automobile. This neighborhood will provide for multiple land uses, with a mix of housing types and incomes, accomplishing a more balanced community. This neighborhood will accommodate the local businesses common to water-based communities (i.e., marinas, bait shops, boat repair, residential bed and breakfast). These businesses will only be allowed if the integrity of a particular area in which they are located is maintained and the business is harmonious with that area. Using highway right-of-way, install bike paths and landscaping adjacent to but separate from the pavement to facilitate bike and pedestrian traffic from this neighborhood to Highway 161 and the Town Center.

Mission Statement for the Northwest Orange Beach Neighborhood

This neighborhood is located west of Highway 161, south of Wolf Bay and north of the State Park to the west corporate limits. This neighborhood is the least developed of all the areas in Orange Beach. This area should be developed using Traditional Neighborhood Design (TND) guidelines. The streets should be developed using grid patterns and limiting the use of cul-de-sacs. Each development is intended to connect with future or existing adjacent developments. A mix of housing types is encouraged. The designation of sites dedicated to large commercial facilities will provide for economic well being and offer job opportunities with compensation higher than minimum wage. This will also provide ridership for a mass transit system. These commercial facilities should be sensitive and compatible to the surrounding area.

Existing Land Use Area

The South Alabama Regional Planning Commission conducted a windshield survey in the Spring of 1993, and collected and mapped information on the existing usage of land in the community. Baldwin County Tax Assessor base maps were used in the field to help increase the accuracy of geographic location and parcel size. If more than one use occurred on a parcel of land, excluding vacant portions of the land, the dominant use determined the category. Eleven categories were used. A brief description of each category follows:

Land Use Categories

Single-Family Residential (detached units): The single-family residential area is one in which single dwelling units and accessory buildings are located on individual lots. This classification also includes single-family seasonal/resort dwelling units used as part of the commercial base necessary to support a resort community.

Duplex Residential (attached units): The duplex residential area is one in which there are two attached dwelling units in one structure. This classification also includes seasonal/resort dwelling units used as part of the commercial base necessary to support a resort community.

Multi-Family Residential (attached units): The multi-family residential area is one in which there are more than two dwelling units per residential structure. This classification also includes seasonal/resort dwelling units used as part of the commercial base necessary to support a resort community.

Manufactured Homes: This single-family residential category includes anything other than conventional dwelling units, including trailers, mobile homes, manufactured homes, etc. that are not sited in designated tourist parks. This classification also includes seasonal/resort dwelling units used as part of the commercial base necessary to support a resort community.

Tourist Cottages and Camps: This category includes areas where signs on the property indicate that cottages or spaces to park dwelling units such as recreational vehicles or trailers are available. It is oriented towards accommodating the seasonal population associated with a resort community.

Hotels and Motels: This category includes structures which are not counted in the U.S. Decennial Census as a dwelling unit and are otherwise conventionally recognized as hotels or motels.

Commercial/Industrial: This category includes land areas, with or without structures, where goods are distributed and personal services are provided and where semi-finished or rough material is further processed, fabricated or manufactured. It includes warehousing and wholesaling establishments engaged in both indoor and outdoor storage or non-retail sales. Land areas where the primary purpose is to provide sleeping accommodations, are excluded from this category as are marinas.

Commercial Water Dependent: This category is consistent with the City's current zoning classification of Marina/Resort which allows water adjacent property to be used for resort marinas. These marinas may also provide facilities for repair, fueling, and maintenance of boats. This category also includes restaurants, shops, and services which cater to the marina trade.

Parks: This category includes public lands planned and currently developed for recreational use or for the protection of natural resources.

Public: This category includes areas occupied by educational and governmental facilities or land which is owned by federal, state or local units of government. Semi-public areas include land which is occupied by privately-owned uses that are generally open to the public such as churches, cemeteries, lodge halls and similar uses. Recreational facilities are also included in this category.

Vacant: This category includes lands used primarily for natural resource production activities such as farming and timber growth. This category also includes land areas within the city used for raising vegetables for personal use and vacant plots not currently undergoing development.

Existing Land Use Analysis

The corporate limits of Orange Beach contains 7,489 acres, of which approximately 3,866 acres (51.62%) are developed. Table 16 shows the existing land uses. The Existing Land Use Map is portrayed in Figure 4.

TABLE 16

EXISTING LAND USE
ORANGE BEACH
1993

	Acres Developed	Percent of Land Developed
Residential		
Single-Family	1,488	19.87
Duplex	5	.07
Multi-Family	126	1.68
Mobile Home	147	1.96
Commercial/Industrial	228	3.04
Water Dependent Col	16	.22
Public	101	1.35
Parks	1,505	20.10
Hotel/Motel	36	.48
Tourist	36	.48
Vacant (Undeveloped)	3,801	50.75
TOTAL	7,489	100.00

SOURCE: Alabama Regional Planning Commission Windshield Survey

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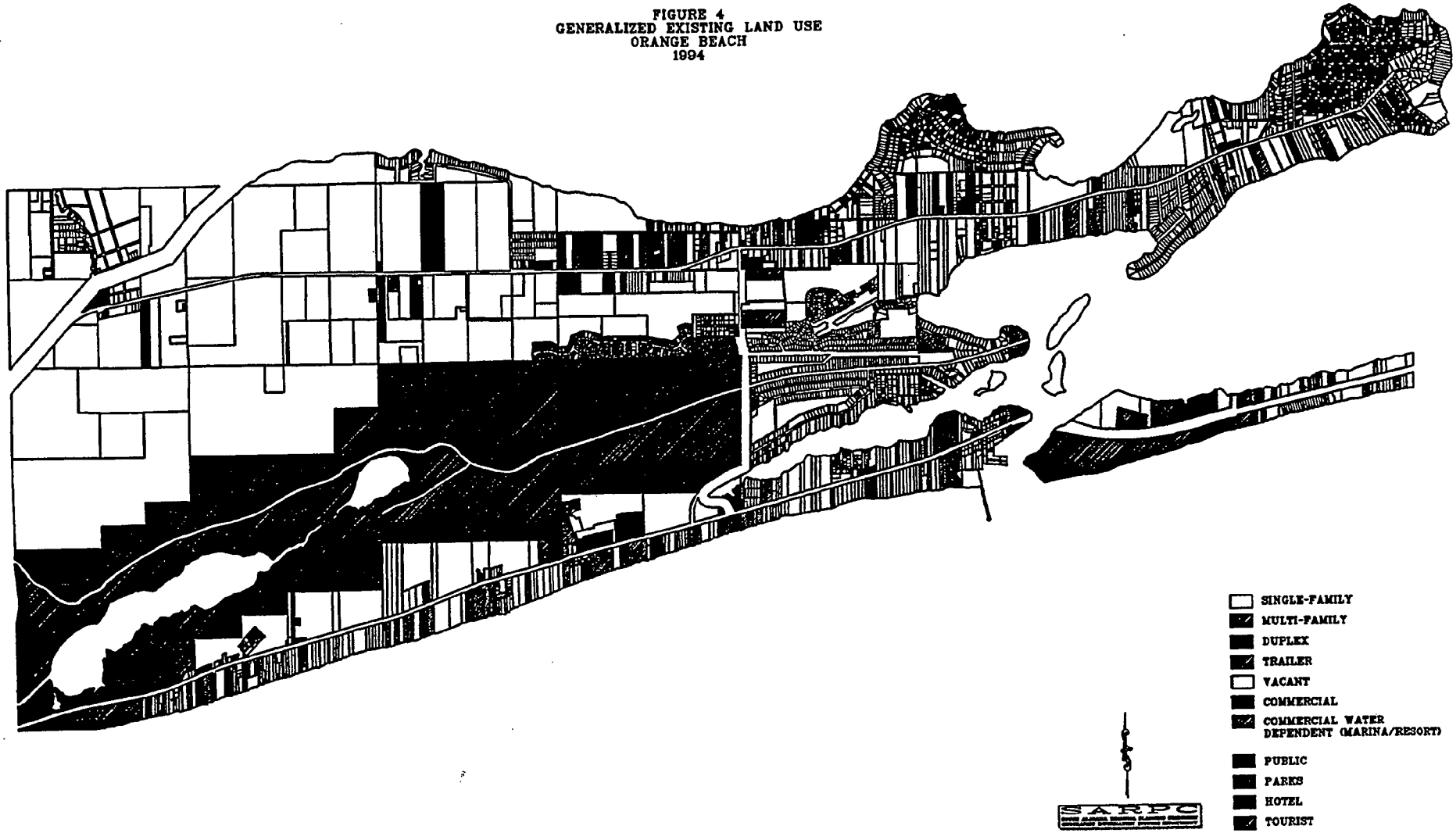
FIGURE 4
GENERALIZED EXISTING LAND USE
ORANGE BEACH
1994



map

Residential

Residential development is the largest use of developed land in Orange Beach. Single-family residential developments are predominant, followed by multi-family and manufactured homes. The multi-family developments are predominately found along the beach and manufactured homes are scattered throughout the City although mostly concentrated in the northeast section of the City.

As shown in Table 16, land developed as single-family residential use is 1,488 acres. There are 2,051.60 acres zoned for single-family/duplex residential use (RS-1, RS-2, and RS-3). Land developed in those particular zoning districts comprise 1,221.20 acres. This leaves 830.48 acres zoned for uses allowed in RS-1, RS-2, and RS-3 currently available for development.

Land developed and used for multi-family use is 131.00 acres. When compared to zoning categories which allow for this type of development (RM-1 and RM-2), there are 250.50 acres zoned with 128.81 acres actually developed, leaving 119.50 acres undeveloped available for duplex or multi-family development.

Land developed for manufactured home usage is 147.00 acres. There are two zoning districts that provide for mobile home placement, MHP and MHS-1. These two zoning districts combined provide 201.60 acres zoned for this land use. It should be noted that the majority of land being used for manufactured home placement is not in zoning districts that allow this type of development.

Commercial/Industrial

Although commercial land use which includes retail, service and wholesale establishments, does not represent one of the largest land uses, it is an important generator of traffic. Land developed as a commercial/industrial use is 222.90 acres. Land zoned for commercial/industrial use is 768.00 acres. Therefore, there are 545.10 acres currently zoned for commercial or industrial use available for development.

Commercial Water Dependent

There are 15.60 acres currently being used in this land use category. There are 214.90 acres zoned as Marine Resort District. This leaves 199.30 acres currently zoned for commercial, water-dependent activity available for development.

Agricultural

This area is located on the outer fringes of the corporate limits and as the City continues to grow, these lands will disappear and be replaced by urban development. There are 1,766.00 acres used for agriculture land use. There are 1,766.10 acres zoned for agricultural use and 1,766.10 acres developed for agriculture use in the agricultural zoning district.

Public/Quasi-Public

The level of governmental services, educational, health, recreational and other cultural facilities is an important aspect of the total development of the City. These facilities are necessary for and environment which provides healthy, functional, and pleasant living conditions. They are also the major elements which enhance the human values of an area and its attraction to new residents.

Public facilities comprise 109.00 acres of developed land in the City. There are 1,505.00 acres developed as park, 101.00 acres developed as public and 2,035.00 acres which are vacant or undeveloped in the City. A comparison of zoning districts is not applicable because the City does not have a zoning category which accommodates these use types.

Vacant/Undeveloped

This land includes woodland, wetland, and vacant parcels, and is devoid of urban development. There are 3,801.00 acres of land which are undeveloped, which equals 50.75 percent of the total land area of the City. Any further development or future use of this land should conform with development policies that are established in this plan.

It should be noted here that within each zoning category, the amount of zoned land exceeds the amount of land currently used. Also, the City has a zoning category for Planned Unit Developments. Land developed in this zoning category is 382.90 areas. These areas could be placed in the zoning category which allows for the particular land use of the property to get a more accurate land development use calculation.

Land Use Relationships

The compatibility of one land use with another in its physical or spatial relationship is a primary factor in the location of new developments. The Orange Beach Zoning Ordinance and this Comprehensive Plan deal directly with the physical relationships of land use types, especially in definition and mapped location of zoning districts. Industrial uses are not normally compatible with low-density residential uses. Thus, there should be horizontal distance, a transitional land use type, or a physical buffer between the two. However, the physical relationship between a neighborhood business such as a convenience store and a residential area could be much closer.

The compatible location of land use types also achieve broader goals of the entire community such as adequate light, air and safety; economically it promotes and conserves the value of land, buildings, and structures; and it promotes the public health, safety, comfort and general welfare of the community. Table 17 outlines general land use types, indicating their basic compatibility and incompatibility with each other.

TABLE 17
LAND USE RELATIONSHIPS
GENERAL

		RESI-DENTIAL		COMMERCIAL			INDUS-TRIAL		COMMUNITY FACILITIES					TRANSPORTATION					UTILITIES		
	Agriculture	Single-Family	Multi-Family	General	Neighborhood	Highway	Light	Open Space	Elementary	Middle-Senior Schools	College	Parks	Municipal Buildings	Terminal & Trader Buildings	Arterial	Major	Collector	Local	Water Supply	Sewage Treatment	Solid Waste Disposal
AGRICULTURE	*	*	*	*		*	*	*	*	*	*	*		*	*	*	*	*	*	*	*
RESIDENTIAL																					
Single-Family	*		*	*					*	*		*					*	*			
Multi-Family	*	*		*	*	*	*		*	*	*	*			*	*	*				
COMMERCIAL																					
General Commercial			*		*	*	*								*	*					
Neighborhood Commercial	*	*	*	*		*						*	*				*	*			
Highway Commercial	*		*	*	*		*							*	*	*					
INDUSTRIAL																					
Light Industry	*					*								*	*	*			*	*	*
COMMUNITY FACILITIES																					
Schools	*	*	*					*				*					*	*			
Parks	*	*	*					*					*				*	*	*	*	*
Municipal Buildings					*							*					*	*			
TRANSPORTATION																					
Terminal & Transfer Facilities	*					*	*								*	*	*		*	*	*
Thoroughfares	*	*	*	*	*	*	*	*	*	*	*	*	*						*	*	*
UTILITIES																					
Sewer Service	*						*	*				*				*					*
Water Service	*						*	*				*				*				*	

Source: South Alabama Regional Planning Commission

Proposed Future Land Use

The Future Land Use in Orange Beach has been developed using the Mission Statements that are seen earlier in this section. The Future Land Use Map is a visual representation of the thrusts of these statements.

Resource Valuable (Wetlands) Development Districts

This District on the future land use map is limited to depicting wetlands. Wetlands are the one major natural resource not present on the City's current zoning map, but which are subject to regulation at the state or federal level. These areas have been designated as *Resource Valuable (Wetlands) Development Districts*. Wetland indicators (transferred from maps produced by the Mobile Office of Army Corps of Engineers and/or approximate locations of hydric soils taken from the *Soil Survey of Baldwin County*) were used to identify these areas. This land use designation is intended as a broad brush approach to identify potentially sensitive areas. The City should update this land use designation when the Advanced Identification Project (ADID) is complete. The City has entered into an agreement with EPA for wetlands delineation through this program.

This land use designation should be incorporated into the Zoning Ordinance as an overlay district. This district will protect environmentally-sensitive lands, while ensuring development options by permitting flexibility in development regulations. The flexibility allowed in cluster development or a Planned Unit Development (PUD) would be a highly desirable method under which to develop the property located in these districts or areas surrounding these districts. Ultimately, however the zoning ordinance and map should govern land use decision making until the community is comfortable with breaking from this tradition.

Residential

Because residential land plays such an important role in the quality of life, planning for the development of residential neighborhoods and support facilities for these neighborhoods (such as parking, schools, shopping, public infrastructure, and public services) is a central concern. Orange Beach must be able to provide sufficient quantities of desirable housing in a variety of structural types and income ranges to meet market demand.

The concept of a *good place to live* is greatly influenced by design and function of the neighborhood. Well-designed and maintained neighborhoods create an environment that is safe from crime and protected from traffic. Neighborhood design can protect property values, and provide desired services and facilities in a pleasing manner.

While residential density is merely a measure of the number of residential structures within a unit area of land, it also affects housing types and has some impact on surrounding land uses. Residential density affects the size and spacing of arterial streets, schools and parks, and commercial areas. It is a determinant of the size of water mains and other utilities. Residential density is a significant factor in the plan for the City of Orange Beach.

Residential areas should have varying densities depending upon the type of development, location and degree of improvements. Table 18 shows development potential in residentially zoned areas that are undeveloped.

These areas represent planned and stable residential uses of all densities. Typically, the land has been divided and approved as a total plan, such as in residential subdivisions or residential cluster-type developments or Planned Unit Developments (PUDs). The areas may also include groupings of single parcel lots with a history of residential use, having grown into stable residential areas over long periods of time, usually due to the presence of other residential uses nearby or within the immediate vicinity.

Most of the remaining undeveloped property assigned to this category, through the zoning map, is located in a *Natural Resource Protection District* and the preferable technique for residential development in these districts would be the cluster-type development or Planned Unit Development (PUD).

Public Park/District-Protected Natural Resources

These districts are able to reinforce the purpose for which many people live or vacation in this area. They provide relief from the strain, pressures and stresses of daily life. The Gulf State Park now makes up the bulk of this property and while wetland indicators are present in the Gulf State Park and other park areas, they are not included in the *Resource Valuable (Wetlands) Development Districts*. These natural resources within the parks are protected.

If the City finds that private development can successfully protect wetlands, then future maps should be adjusted to change the designation of the protected property from the *Resource Valuable (Wetlands) Development District* to *Public Parks-Protected Natural Resources*. When resources are protected and this is evident to the population, the area becomes qualitatively more valuable.

TABLE 18
DEVELOPMENT POTENTIAL IN RESIDENTIAL USES
VACANT LAND BY RESIDENTIAL ZONING DISTRICT
ORANGE BEACH
1992

Residential Land Use	Acres Developed[1]	Estimated No. of Units in 1992[2]	Average No. of Units Per Acre[3]	Residential Zoning Districts	Acres Developed[4]	Average No. of Units Per Acre[5]	Acres Vacant by Zoning District[6]	Average No. of Units Permissible Per Acre[7]	Development Potential of Vacant Land Zoned for Residential Dev. by No. of Units
Single Family	1,488	1,594	1.07	Single Family	1,650	1.03	803	N/A	3,152
	1990 Census Building Permits through 1992	1,431 163		RS-1 RS-2 RS-3 PUD	908.65 304.94 7.53 382.9		708.25 98.56 23.67 0	3.5 6.5 13.0 7.7	2,478 367 307 N/A
Trailers	147	612	4.16	Trailers	.92	6.65	110	N/A	671
	1990 Census Building Permits through 1992	612 0		MHS MHP	7.23 24.36		102.67 7.34	6.0 7.5	616 55
All Other Units	203	2,605	13.62	All Other Units	380	14.59	252	N/A	5,507
	1990 Census Building Permits through 1992			RM-1 RM-2 BR-1 BR-2 MR	46.25 82.56 16.29 95.28 139.97		7.91 47.02 74.93 57.65 64.04	28.4 28.4 28.4 28.4 28.4	225 1,335 2,128 1,637 1,819
TOTAL	1,851	4,972	N/A	N/A	2,075	2.32	1,165	N/A	933

1 Data collected from windshield survey conducted in the Spring of 1993 to record land use type on individual parcels throughout the City.
2 Data based on 1990 U.S. Census of population added to building permits issued by the City during 1990, 1991 and 1992.
3 Derived by dividing "Estimated Number of Units "by Acres Developed".
4 Derived by dividing "Estimated Number of Units" by "Acres Developed".
5 Based on current Zoning Ordinance and allowing 25 percent of land area for infrastructure.
6 Average of *RS-1, RS-2* and *RS-3*.
7 Based on the highest number of units allowed (10 units).

Source: **South Alabama Regional Planning Commission**

Mixed Use District

This district was created to achieve two purposes--to allow for flexibility to follow the existing zoning map and to change the zoning map as new visions develop which incorporate minimizing the impact of development upon surrounding fragile ecosystems. These districts are more often than not within close proximity to a *resource valuable (wetlands) area.* The development of these properties is likely to have an impact on property that is resource valuable. If impacts will occur, cluster development or Planned Unit Development would be the optimal type development.

Marina District

The boundaries of these districts were transferred directly from the zoning map onto the Future Land Use Map, with a few exceptions. The majority of those exceptions were made to accommodate areas which have been identified with wetland indicators and were placed in the *Resource Valuable (Wetlands) Development District.* The current Marina Districts are now developed in the same manner as a Planned Unit Development. As this recreational feature has grown, so have the number of conflicts among coastal area users. Further study is needed to implement and to improve coordination between recreational boating use, water quality and land use, as well as to guide marina siting.

Solutions which minimize the impact of development upon the coastal waters, salt marshes, wetlands, beaches and upland areas on which activities may take place which will affect the tidal waters are an important goal. Further assistance with these matters can be accomplished through the Coastal Zone Management Program managed by the Alabama Department of Economic and Community Affairs. A successful Coastal Zone Management Program is structured to assure that the needs of one user group will not be met at the expense of others. The City should move to take advantage of the quality of information which can be generated and collected by drawing upon this particular resource.

Commercial

These districts show where a strong trend of commercial clustering is now occurring and include a number of adjacent vacant lots for future development. Commercial uses include those listed in the current ordinance as neighborhood or general commercial. Areas where commercial uses are mixed with other uses and where future commercial establishments may also be able to locate can be found in the Mixed Use District.

Beachfront Mixed Use District

The property located in this district is the most valuable, and the most prone to natural disaster. The property is responsible for generating significant amounts of revenue, but its cost has not been adequately studied. The capital which has been so lavishly invested, for the purpose of return and for generating indirect revenue flow, is highly vulnerable. In the event of a disaster, the revenue upon which the City has become so heavily dependent, will cease to be generated.

Only about 14 percent of the developable beachfront land (on a parcel basis) remains vacant and most of this is zoned for high-density use. Aesthetically, low-density development has been more successful than multi-family development at preserving the natural beauty and environmental quality of the beachfront. Where several large structures have been built next to one another, they have created an imposing and massive wall of concrete, not compatible to the human scale and beauty of the environment. There are several areas, presently vacant, which are zoned multi-family and when developed according to the existing zoning ordinance, can be expected to produce a similar effect. Rezoning additional single-family to multi-family would be desirable only if a higher quality of design could be achieved. A credible program to reward design excellence should be considered as part of the City's future, for this district as well as for all others.

Industrial

Industrial activities many times involve the processing, handling and creating of products as well as research and technological processes. Heavier industries may include manufacturing, assembling, fabrication and processing, bulk handling of products, storage, warehousing and heavy trucking. All should be interrelated in terms of intensity of use. They should be operated to minimize external effects of noise, glare, air and water pollution and fire. They should be near adequate utilities and transportation facilities. The area shown as industrial on the Future Land Use Map is where there is an existing trend for industrial development. No natural hazards should be aggravated and the general character of Orange Beach should not be changed.

Public Facilities

This area reflects the City Hall Complex, fire stations and water towers. This is not expected to change throughout the planning period.

Annexed Land

The direction of growth for the City are limited to three areas. One is the possible incorporation of Ono Island, the second is annexation of the areas north of the Intracoastal Waterway, and the third is the possible acquisition of State Park properties adjacent to the City.

The City's policy will be to continue to respond to and honor individual annexation petitions by individuals and areas, as long as the land is contiguous to the corporate limits. This land will be zoned for residential use (RS-1) unless it is otherwise classified by the Planning Commission and City Council and is in conformity with the Comprehensive Plan.

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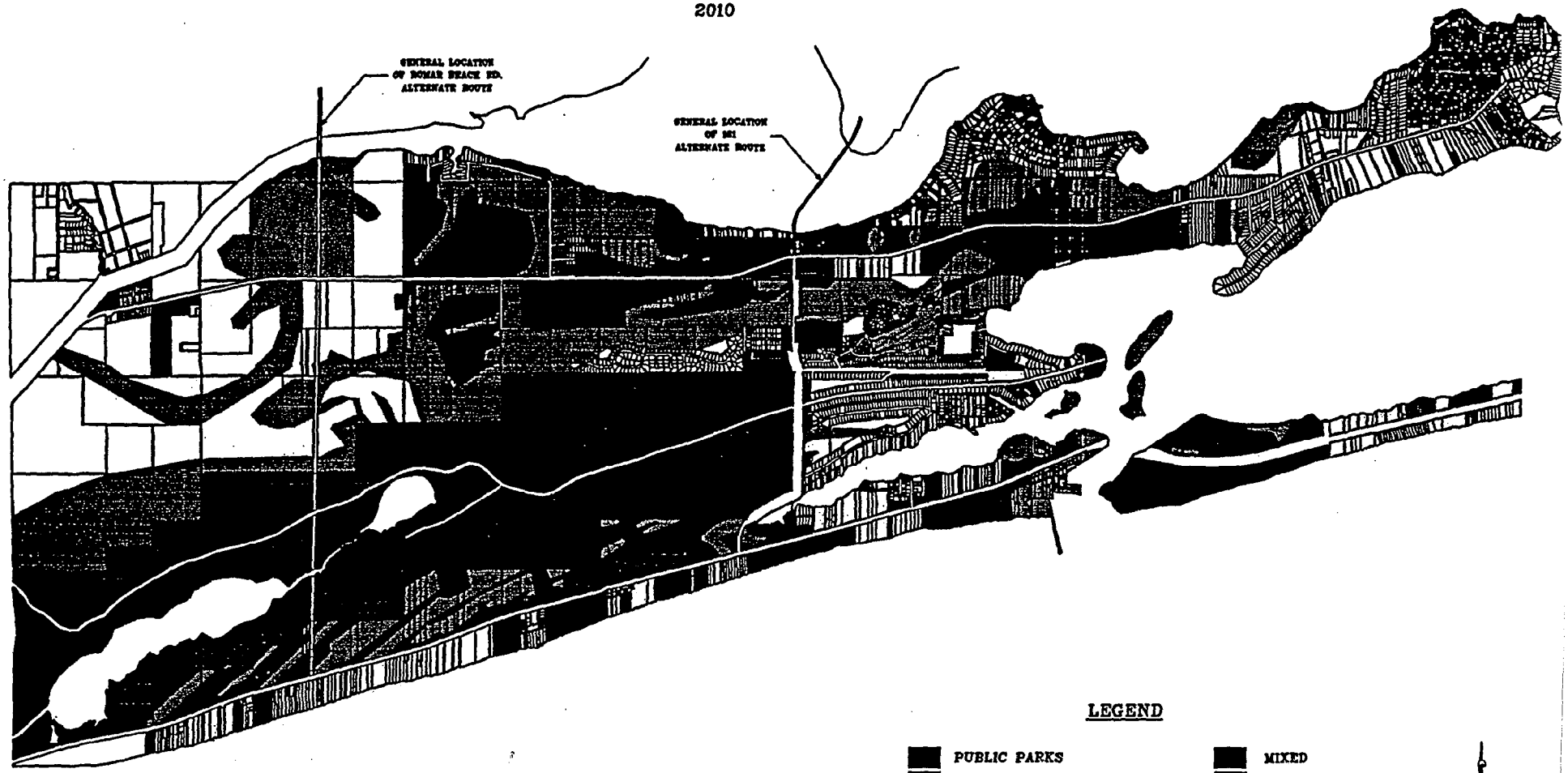
GENERALIZED FUTURE LAND USE
ORANGE BEACH
2010



FIGURE

Recommendations

Romar Beach Neighborhood and the Town Center Area

- For lands designated as Mixed Use on the Future Land Use Map, require architectural design guidelines for properties abutting the north and south side of Highway 182 (east of 161) and the east and west side of Highway 161. This requirement may be reviewed case by case to ensure there will be protection to any existing trees of significance (6" in diameter). Commercial development should not be authorized by the City prior to an agreement between the City and the Highway Department which accomplishes the provisions as set forth by the mission statement for this area.

- Require parking to be located on the side or to the rear of the development. Limit the number of parking spaces for uses other than residential. (Possibly require only enough for the employees.)

- Provide City-owned parking areas to satisfy existing parking needs.

- Coordinate with the State Highway Department to redesign portions of Highway 182 and Highway 161 to the collector classification as shown on the Future Transportation Map.

- Coordinate with the State Highway Department to redesign portions of Highway 182 and Highway 161 to:

    * Provide on-street parking
    * Provide sidewalks
    * Provide a median
    * Lower speed limit to 35 mph
    * Provide pedestrian cross walks with lighted signals

- Purchase property surrounding City Hall to develop the Civic Complex.

- Establish a Citizens Committee to develop the theme, style and development layout of the Civic Complex.
- Replace street lights to pedestrian-scale street lights.

Alabama Point/Perdido Key Neighborhoods

- Provide pedestrian-sized walkways and landscaping that encourages pedestrian mobility.
- Coordinate with the State Highway Department to provide for bike trails located within the right of way but separated from the Highway pavement.

East Orange Beach/Bear Point Neighborhood

- Create a zoning district that will allow for businesses typical to a water-based community to be scattered throughout this area.
- Allow setback flexibility to accommodate additional small housing units on lots already occupied by a primary building.
- Coordinate with the State Highway Department to provide for bike trails located within the right of way but separated from the highway pavement.
- Consider this area as an area for redevelopment featuring Traditional Neighborhood Design characteristics. The City should seek state and federal funding sources to facilitate this redevelopment.
- Designate an area for a park/open space to serve the needs of all residents regardless of their age. This area should be identified on the Future Land Use Map.

Northwest Orange Beach Neighborhood

- Designate flexible zoning criteria for areas in this neighborhood to allow for a mix of housing types.
- Design a master street plan for this area. Special attention should be given to the *resource valuable (wetlands) area* designation on the Future Land Use Map.
- Designate areas for large commercial facilities on the Future Land Use Map.
- Designate areas for the development of small neighborhood businesses to accommodate the needs of the neighborhood.

Additional Recommendations for All Neighborhoods

- Create Neighborhood Development Committees to ensure that development is in compliance with the Mission Statement for that neighborhood and with the Comprehensive Plan
- Adopt additional building codes requiring buildings to be built with the latest state-of-the-art materials and workmanship to sustain hurricane force winds and storm surges.
- Adopt additional guidelines for dune protection.
- Adopt guidelines for dune reconstruction due to relocation caused by storms.
- Adopt guidelines that require improvements for all utilities be underground. This includes, but is not limited to, new service lines for an area, repair/replacement lines for an area and redevelopment of an area.

- Adopt procedures for the City to purchase beachfront property.
- Create a staff position to be filled by a professional City Planner.
- Adopt guidelines that prohibit colored soil on the beach (south of Hwy. 182).
- Promote the decentralization of low-cost housing. Provide a Zoning District that allows for a primary and secondary dwelling unit on a single lot.
- Establish density requirements for developments and incorporate in the zoning ordinance.
- Establish regulations that encourage commercial developments that maintain desirability, quality and integrity of residential life in Orange Beach.
- Develop written policies on economic development to guide industrial/business location in close coordination with the local Chamber of Commerce.
- Coordinate with the Alabama Gulf Coast Convention and Visitor's Bureau to determine occupancy loads for condominiums to determine impact on public facilities.
- Establish an architectural review committee to review and monitor proposed developments using established guidelines.
- Update the Future Land Use map with the ADID results.
- Develop a coastal zone management program.

- Encourage clustering and innovative design for developments occurring in or adjacent to resource valuable areas.
- Develop zoning districts that require designs which enhance and maintain the City's natural beauty.
- Manage growth to ensure environmental protection.
- Review each proposed development to ensure that adequate utility capacities exist (i.e., water, sewer and drainage).
- Develop landscaping guidelines that ensure a high percentage of native plants are used for each proposed development.
- Develop a stormwater management study and require drainage studies for all proposed developments.

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HOUSING

GOAL:

Encourage the availability of an adequate supply of housing to meet all residential needs of the City of Orange Beach.

The purpose of this section is to provide guidance to the private sector in providing an adequate housing supply for the existing and projected population, and to the public sector to ensure that land use controls allow for future permanent year-round and seasonal housing needs.

OBJECTIVES:

- Encourage the private sector to provide safe and affordable dwelling units of all types through 2010 to meet the housing needs for the projected population of Orange Beach.
- Continue code enforcement programs to eliminate sub-standard housing conditions and establish criteria for making structural and aesthetic improvements to existing housing and neighborhoods.

Inventory

Age of Housing Stock

The 1990 U.S. Census estimates that there were 4,398 housing units in the City of Orange Beach. Of the 4,398 existing housing units, 1,381 were built prior to 1980. The remainder (3,017) were built between 1980 and 1990. Table 19 gives a more detailed account of the age of housing structures in Orange Beach. A housing boom occurred after Hurricane Frederick devastated the Alabama coastal area in September of 1979. Luxury beachfront condominiums were the predominant type of construction. Permanent single-family residential construction was almost non-existent due to land and construction costs being accelerated by prospective developments. Many of the older homes have not been repaired to acceptable standards and have become dilapidated (occupied) housing units.

Type of Dwelling Units

According to the 1990 U.S. Census, only 1,026 (23.3%) of the 4,398 housing units were occupied, leaving the remaining 3,372 (76.7%) vacant. Of the City's housing stock, 32.5 percent were single-family, detached units; 54.0 percent were attached units, ranging from single-family attached to 50 units or more. Table 20 emphasizes the large percentage of multi-family units and mobile homes in housing the area's population. This high percentage of multi-family units and mobile homes is a result of the high seasonal and tourist population levels and escalating land prices that force year-round residents, with limited incomes, to occupy mobile homes or become renters. According to the 1990 U.S. Census, mobile homes represented 13.9 percent of the total dwelling units.

TABLE 19

AGE OF HOUSING STRUCTURE
ORANGE BEACH
1990

Year Structure Built	Number	Percent
1989 to March 1990	58	1.3
1985 to 1988	774	17.6
1980 to 1984	2,185	49.7
1970 to 1979	818	18.6
1960 to 1969	273	6.2
1950 to 1959	195	4.4
1940 to 1949	60	1.4
1939 or earlier	35	0.8
TOTAL	4,398	100.0

Source: U.S. Census, 1990, Summary Tape File 3

TABLE 20

TYPE OF DWELLING UNITS
ORANGE BEACH
1990-1994

Type of Dwelling Units	1990 No.	1990 Percent	1992 No.	1992 Percent	1994 No.	1994 Percent
Single family units, detached	1,431	32.5	1,594	33.1	1,776	29.4
Mobile home	612	13.9	612	12.7	612	10.2
Other*	2,355	56.6	2,605	54.2	3,637	60.4
TOTAL	4,398	100.0	4,811	100.0	6,035	100.0

* Includes single-family attached, duplexes and multi-family.

Source: *U.S. Census, 1990, Summary Tape File 3*
City of Orange Beach Building Inspection Department

Over seventy-five percent (76.7%) of the total housing units were identified as seasonal by the 1990 U.S. Census, 64 percent of which were condominium-type housing units. Though not permanent housing units, the 4,915 seasonal units do represent a housing unit type that impacts the City economically, physically and socially. Table 21 illustrates occupancy distribution by housing type and estimated number of units in 1992 and estimated population occupying those units.

TABLE 21

OCCUPANCY DISTRIBUTION BY HOUSING TYPE AND NUMBER
ORANGE BEACH
1992

Housing Type	Occupancy Distribution by Population Type		No. of Units in 1992	Estimated Population
Single Family			1,594	3,768
	Permanent	44.7%	713	*1,554
	Seasonal	55.3%	881	**2,202
Trailers			612	1,267
	Permanent	35.8%	219	*478
	Seasonal	64.2%	393	***786
All other Units			2,605	6,457
	Permanent	6.9%	180	392
	Seasonal	93.1%	2,425	6,062
Total	Permanent	100.0%	1,112	2,424
Total	Seasonal	100.0%	3,699	9,050
TOTAL			4,811	

Source: *1990 U.S. Census*
City of Orange Beach
South Alabama Regional Planning Commission calculations

* Based on 2.18 persons per unit in 1992
** Based on 2.50 persons per unit (average no. of tourists traveling by automobile)
*** Based on 2.00 persons per unit (SARPC calculations based on average size of unit)

Table 22 gives an inventory of seasonal units by type. Table 23 gives a listing of RV parks and camps and the utilities provided.

TABLE 22

INVENTORY OF SEASONAL UNITS
ORANGE BEACH
1995

Hotel and Motel Units	814
RV and Camping Units	264
Mobile Home Parks	406
Rental Condominiums	3,431
Total Seasonal Units	4,915

Source: South Alabama Regional Planning Commission
City of Orange Beach

TABLE 23

RV PARKS AND CAMPS
ORANGE BEACH
1994

Name, Number and Type of Accommodation			Each Space has the Following Connections			
Name	Spaces	Type	Water	Sewer	Electricity	None
Azalea Village	110	RV	110	0	110	0
Beech RV/Camper Park*	*39	Mob Hm	39	39	39	0
	56	RV	56	56	56	0
	10	RV	10	10	0	0
	20	Tents	0	0	0	20
Perdido Key	19	RV	0	0	19	0
R&R Camper Park	30	RV	0	0	30	0
Minus Spaces used Year-round	<20>	N/A	<20>	<20>	<20>	0
TOTAL	264					

* *Locations where the number of year-round spaces have been identified. Consideration must be given by the user that shifts in the number of year-round spaces tend to vary over time. Not all locations have been verified as to type of facilities being provided.*

Source: South Alabama Regional Planning Commission

Table 24 illustrates a generalized inventory of housing units in Orange Beach in 1994.

TABLE 24

GENERALIZED INVENTORY OF HOUSING UNITS
ORANGE BEACH
1994

	1990 Census			1990-1994			
Type of Unit	Units Total	Units Occupied	Percent Occupied by Type	Units No. Permitted	Estimate No. Perm. Population	Estimate Not Occupied	Estimate Seasonal
Single Family Detached	1,431	610	42.7	345	147	9	189
Mobile Homes	612	206	33.7	0	0	0	0
All Other Units	2,355	210	8.9	1,292	115	35	1,142
TOTAL	4,398	1,026	N/A	1,637	262	44	1,331

Source: 1990 U.S. Census of Population and Housing, STF-3A
South Alabama Regional Planning Commission calculations

Owner-occupied and Renter-occupied Dwelling Units

The 1990 U.S. Census indicated that of the 798 or (78.0%) occupied housing units in the City's 1,026 were owner-occupied. Only 0.1 percent of the City's owner-occupied housing was owned by non-whites. The 1990 census data reported that 228 (22.0%) of the 1,026 occupied housing units were renter-occupied; 3,372 housing units were vacant, a figure which represents 76.7 percent of the City's total housing stock. Of these vacant units, only 23 were true rental units. The remaining 3,349 housing units were for sale, seasonal use or other type of vacancy. Table 25 shows housing tenure and vacancy.

TABLE 25

HOUSING INVENTORY BY TYPE AND TENURE
ORANGE BEACH
1990

Type	Total	%	Vacant	%	Owner	%	Renter	%
Single Family Detached	1,431	32.5	821	24.3	520	65.0	90	39.5
Single Family Attached	40	.9	6	.2	16	2.0	18	7.9
2 Family	14	.3	4	.1	6	.8	4	1.8
3-4 Family	20	.4	7	.2	7	.9	6	2.6
5-9	56	1.3	31	.9	12	1.5	13	5.7
10-19	99	2.0	67	2.0	10	1.2	22	9.6
20-49	310	7.0	275	8.2	25	3.1	10	4.4
50 or more	1,792	40.7	1,749	51.9	27	3.9	16	7.0
Mobile Home	612	13.9	406	12.0	157	19.7	49	21.5
Other	24	.5	6	.2	18	2.3	0	0
All Units	4,398	100	3,372	100	798	100	228	100

Source: 1990 U.S. Census of Population and Housing, STF-3A

Monthly Cash Rent

The median monthly rent for non-seasonal renter-occupied housing units in Orange Beach was $456 in 1990, as reported in the 1990 U.S. Census. Of the 228 non-seasonal rental units, almost 35 percent were above the median interval ($450-499). Thirty-three of the total rental units were without cash rent.

Value of Owner-occupied Housing

The median value of specified owner-occupied housing units for Orange Beach was $97,000 in 1990. Over 41 percent of owner-occupied dwellings cost within the $60,000 to $124,999 range. There is currently a 32-unit Farmers Home Administration-assisted apartment complex for low to moderate income residents. A building permit has been issued for an additional 31-unit FMHA apartment complex. There are no Section 8 houses and no public housing programs in Orange Beach. It was estimated by the 1990 U.S. Census that 33 percent of the households in Orange Beach had low to moderate incomes.

Housing Stock Conditions

The South Alabama Regional Planning Commission conducted a visual survey of exterior housing conditions in November 1993 and found that 21 conventional single-family dwellings were in varying degrees of substandard conditions. (This list includes standard conditions with slight defects that can be corrected through minor maintenance). The City Council adopted Southern Standard Building Code in 1991. The Public Works Department is responsible for the enforcement of this code throughout the City.

Mobile Home Parks and Subdivisions

Orange Beach's zoning ordinance permits mobile homes in mobile home parks and mobile home subdivisions. There are five parks and three subdivisions in the City. There are also approximately 200 individual mobile homes scattered throughout the City which were in place prior to the adoption of the zoning ordinance.

Analysis

Population Expected to Reside in the City

Population projections for the year-round population are the result of a straight-line extrapolation based on the annual average growth rate, excluding annexations. The projected population for the years 2000 and 2010 are 2,959 and 3,874, respectively. These figures are estimates and would change if annexation occurs or population growth rates significantly change. As noted in the Population section, the seasonal population projection estimates for Orange Beach are 25,836 for 1998 and 32,484 for 2008.

Household Size

The 1990 U.S. Census reported 1,036 year-round households in the City. The projected number of year-round households in 2000 and 2010 are 1,363 and 1,785, respectively. According to the 1990 U.S. Census, the average household size was 2.17 persons. Based on information provided from the Orange Beach Building Department, the current persons per household average is 2.18. This is likely to remain low as a result of lower birth rates, increased longevity of the elderly and the single-oriented and late-married lifestyle trend.

Projected Year-Round Housing Needs

The preceding section identified projected changes in household composition. These changes are the basis on which projected household needs are developed. The following assumptions have been made to project future needs:

- Households with only one or two persons are assumed to need dwelling units with two or fewer bedrooms. Three and four person households are assumed to need three bedroom units, and five or more person households are assumed to need four or more bedroom units.

- Higher income families may occupy larger dwelling units than would be required by the household size. Lower income households may, by necessity, occupy units smaller than actually needed.

- The occupied housing distribution between owner occupancy and rental occupancy reported in the 1990 U.S. Census was 78 percent owner-occupied and 22 percent renter-occupied. Projections will be based on 30 percent owner-occupancy and 20 percent renter-occupancy.

- The distribution among the various types of units (single-family, duplex and multi-family) will continue to shift toward multi-family housing.

- In 1990, there were no persons residing in group quarters. It is assumed that this number will remain zero.

New Household Formations

The greatest housing need will be in the middle income groups, which will require the majority of the housing units by the year 2010.

The 1990 U.S. Census showed an overall vacancy of 5.8 percent for the permanent population of Orange Beach. For the purpose of this study, a 5.8 percent vacancy rate has been established. This translates into 94.2 occupancy rate for the permanent population.

It is impossible to project seasonal housing needs with any certainty. Therefore, the following housing needs are specifically for the year-round, permanent population. By the year 2000, 267 additional housing units are needed and by 2010, a total of 715 housing units will be required for the permanent population. Table 26 illustrates housing unit requirements for the permanent population.

TABLE 26

HOUSING UNIT REQUIREMENTS FOR PERMANENT POPULATION
ORANGE BEACH
1992-2010

Housing Elements	1992 Permanent	2000 Permanent	2010 Permanent
Population	2,424	2,959	3,874
Persons in Group Quarters	0	0	0
Persons/Occupied Units	2.1%	2.1%	2.1%
Occupied Units	1,112	1,363	1,785
Occupancy Rate	.942	.942	.942
Total Units	1,180	1,447	1,895
Additional Units Required	N/A	267	715

Source: South Alabama Regional Planning Commission calculations

Recommendations

- Provide appropriate zoning designations that allow adequate residential development of all types.
- Provide sewer and water service to existing and proposed residential developments.
- Identify rehabilitation target areas and seek funds or city monies to:
  - * Demolish housing units unsuitable for rehabilitation
  - * Demolish abandoned non-residential structures
- Rehabilitate substandard units using financial assistance programs offered by federal and state agencies.
- Establish an Affordable Housing Task Force to recommend programs to help provide affordable housing.

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TRANSPORTATION

GOAL: **Provide a safe and efficient transportation system for all residents and visitors, creating a pedestrian oriented environment and adding some form of mass transit to lessen dependence on the automobile.**

The purpose of the Transportation Element is to plan for future motorized and non-motorized transportation systems. An essential basis for planning transportation systems is the Land Use Element, specifically the Future Land Use Plan. The Future Land Use Plan will direct where roadway facilities are needed.

OBJECTIVES:

- Coordinate the City of Orange Beach's transportation system with the Future Land Use Plan, as well as with public safety concerns.
- Prioritize transportation improvements which enhance and maximize the efficiency of the existing system and negate the need for expensive transportation projects.
- Identify high accident locations along roadway links and at intersections, and take measures to minimize these on a continuing basis.
- Require developers to bear the burden of cost for roadway improvements necessitated by impacts to the roadway network caused by traffic generated by new developments.

- Actively pursue and acquire right-of-way for future roadway improvements which are necessary for adequate traffic flow and arterial spacing.
- Develop policies that will ensure the safe and effective movement of bicycles and pedestrians.
- Improve and/or provide street lighting where necessary.
- Coordinate with the State Highway Department to provide an additional hurricane evacuation route as well as other improvements identified in this section.

Analysis

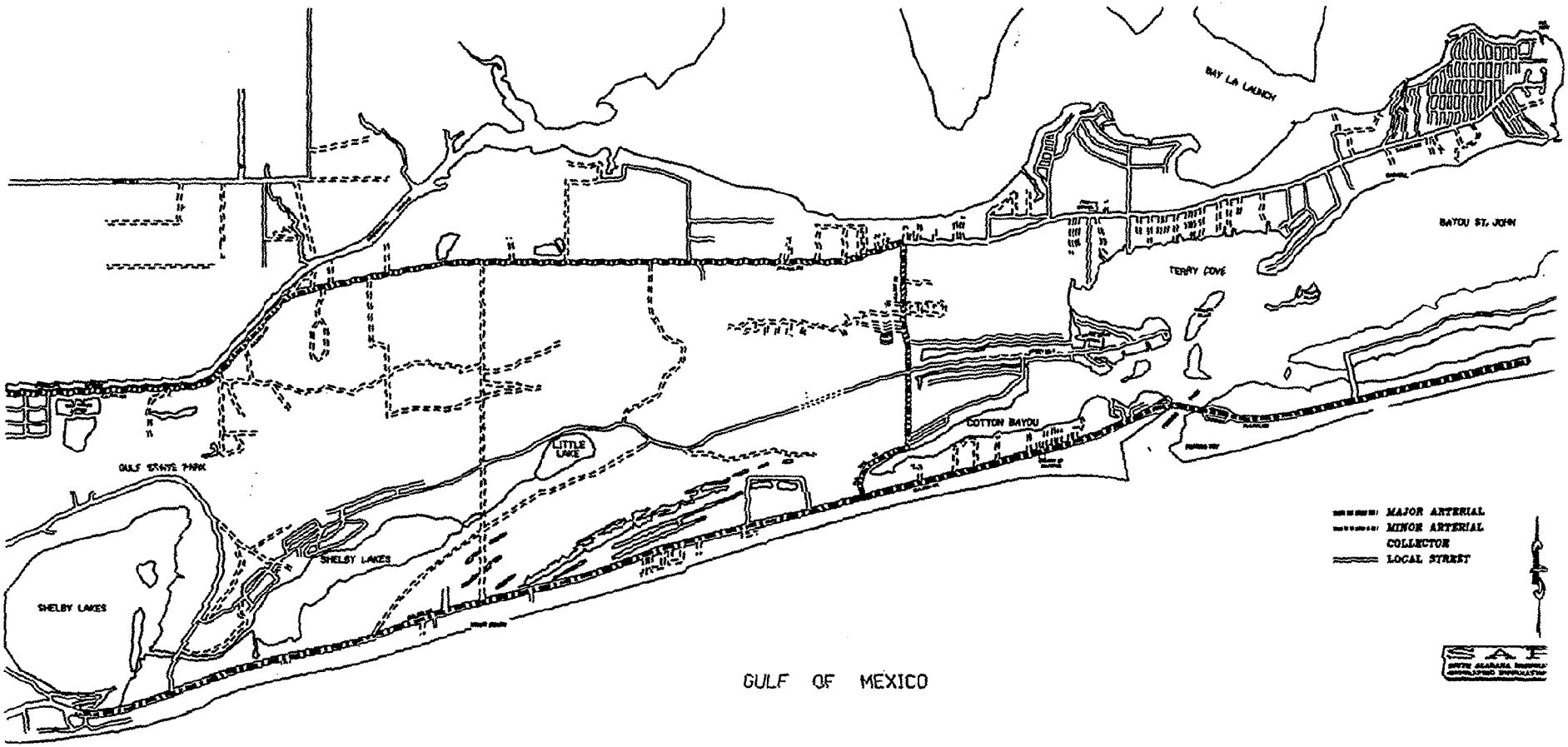
Before a local government can adequately plan for its future, it must assess the capability of the existing transportation system to serve current and future demand. Therefore, it is necessary to determine existing levels of service and to identify roadway deficiencies within the transportation system.

The City of Orange Beach has developed along an east-west axis. Alabama Highways 180, the northern roadway, and 182, to the south, serve as major east-west traffic carriers for the community. Primary north-south access is provided by Alabama Highway 161, as shown on Figure 6.

The problem of a new evacuation corridor plagues the city. With the continuous residential and commercial development of Orange Beach and the overall increase in tourism along the Gulf Coast, Orange Beach, whose limited access to the mainland poses a potentially serious situation for hurricane preparedness, must address this critical deficiency in the transportation network.

A large part of the seasonal/tourist population utilizes non-motorized transportation. The City at this time has not developed a multi-modal transportation plan.

FIGURE 6
EXISTING TRANSPORTATION NETWORK
ORANGE BEACH
1995



PAGE 2 OF FIGURE 6

Functional Classification

The functional classification system separates, divides, or groups streets by a hierarchical system based on street function. This classification system is used to balance traffic movement and accessibility on different roadways.

The classes of roadways in Orange Beach range from major arterial, emphasizing the movement of large volumes of traffic, to local streets, emphasizing access to adjacent properties. The four basic categories of street classifications in Orange Beach are:

Principal Arterial System - The function of a principal arterial is primarily to provide major traffic movement capability, and to:

- Provide access to adjacent land
- Carry a high percentage ratio of total vehicular miles traveled to total miles
- Carry the majority of through trips and longer internal trips

Principal arterials consist of (1) interstates, (2) other limited access roads, and (3) arterials without access control.

Minor Arterial System - The function of a minor arterial is to:

- Provide lower level of mobility than principal arterials, but traffic movement is still the primary purpose
- Provide access to adjacent land, but generally does not bisect or enter neighborhoods

The Alabama Department of Transportation's 1993 functional classification of roadways identifies two arterials in Orange Beach, Alabama Hwy. 182, which is a principal arterial and Alabama Hwy. 161, a minor arterial. Alabama Hwy. 182 traverses the City, extending west through Gulf Shores and east into Florida. It carries four lanes of through traffic and a center turning lane. Alabama Hwy. 161, the north-south arterial axis through Orange Beach, has two lanes. For the purpose of this study, Alabama Hwy. 180 (Canal Road) has been added as a minor arterial.

Collector - The function of a collector street is to:

- Provide both limited mobility and good access to adjacent land
- Carry traffic between the local street system and the arterial system
- Carry little, if any, through traffic
- Serve local areas

Generally, major collectors are two-lane undivided streets with rather rigid traffic controls. Major collectors are often found in areas with significant traffic movement, such as industrial and business parks and retail areas. They may include flared intersections to accommodate left and right turn lanes at busier intersections. The minor collector is undivided, and may allow some parking on each side.

The main difference between collector and arterial streets is the length and type of trip accommodated. Classified as a major collector, Alabama Hwy. 180 is two lanes. Traffic counts on this collector are significantly different east and west of Alabama Hwy. 161, reflecting its segmented functions. West of Alabama Hwy. 161, the traffic volume is considerably higher than the eastern segment, where it serves only a residential area. However, in the local context, this western segment functions more as a minor arterial and the eastern segment functions as a major collector. County Road 2 (Marina Road), traveling east from Alabama Hwy. 161, also functions as a major collector.

Local Streets - The primary function of local streets is to:

- Provide full access to adjacent land, but with the lowest level of mobility.
- Generally carry no through traffic.

Depending upon the types of areas served and the service demands placed upon them, local streets may be sub-categorized as residential, industrial and business.

This inventory of the existing traffic circulation was prepared as a basis for determining existing and projected roadway deficiencies in Orange Beach.

Traffic Volumes

Forecast conditions for the transportation network are tied to current traffic trends and projected forward. Current traffic conditions are described as level of service (LOS) A, B, C, D, E or F (Figure 7 describes each of these conditions). This system of describing traffic conditions is hierarchical, with LOS A being best and descending to LOS F as traffic conditions deteriorate. Service levels A through D are determined to be acceptable in an urban environment. It must be noted at this time the LOS described are for urbanized areas, so Orange Beach residents may not have the ability to tolerate LOS less than A or B.

Generally, lowest service levels would be expected at peak hours, which are morning and evening *rush hours* as well as peak beach and tourist weekends, such as Memorial Day, Labor Day, Fourth of July and during the annual Shrimp Festival. Therefore, it is possible that streets with service level A during off-peak periods may experience level E or F conditions for one or two hours during these peak times.

FIGURE 7

LEVEL OF SERVICE
CITY OF ORANGE BEACH
1994

Level of Service (LOS)	Description
A	Highest LOS, which describes primarily free-flow traffic operations at average travel speeds. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at intersections is minimal.
B	Represents reasonable unimpeded traffic flow operations at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.
C	Represents stable traffic flow operations. However, ability to maneuver and change lanes may be more restricted than LOS B, and long queues and/or adverse signal coordination may contribute to lower average travel speeds. Motorists will experience noticeable tension while driving.
D	Borders on a range in which small increases in traffic flow may cause substantial increase in approach delay and, hence, decreases speed. This may be due to adverse signal progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.
E	This is the beginning of an inadequate network, with long queues causing excessive delays.
F	This represents traffic flow characterized at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high approach delays resulting in more traffic demands than signal capacity.

Average Daily Traffic Volumes

Historical average daily traffic counts and the most recent traffic counts were obtained from Alabama Department of Transportation. The most recent counts available were taken during 1992. These volumes represent average daily traffic at particular locations, as shown in Table 27. Current problems in the network were identified by comparing maximum roadway capacities with actual volumes. The traffic volumes used here are to provide a general indication of problem areas or potential problem areas. Levels of Service (LOS) were derived using information from Table 28. It should be noted here that the LOS shown using information from Table 28 and the traffic counts provide by the Alabama Highway Department indicates that all primary transportation corridors are operating at LOS A. Perception of the driver is of critical importance regarding this. If a driver perceived that there are unnecessary delays or that a roadway is over-crowded then that roadway is not operating at an adequate LOS. A driver would expect delays when traveling along corridors through, for example, Atlanta or Dallas. but these same delays are not tolerable when traveling through Orange Beach, Alabama, even though all three roadways are operating at LOS A.

All stations have shown an increase of 119 percent to 410 percent since 1979. The most significant increases occurred on Alabama Hwy. 182 east of Alabama Hwy. 161, a logical outcome of the developments along the beach. The second largest increase in traffic over the time period was also on Alabama Hwy. 182, west of Alabama Hwy. 161. Traffic along Alabama Highways 180 and 161 increased steadily from 1979 to 1992. Traffic counts for Alabama Hwy. 182 at the Florida state line are only available from 1986, but still show a substantial increase. Most of the significant traffic growth along this network occurred 1986 to 1992.

TABLE 27

HISTORICAL AVERAGE DAILY TRAFFIC COUNTS ON U.S. HIGHWAYS ORANGE BEACH 1979-1992

	Location	1979	1981	1983	1985	1986	1988	1990	1992	% Change 1979-1992	LOS
1.	Rt. 180 West of 161	1,740	2,350	2,700	2,920	3,460	3,770	4,970	5,310	+205%	A
2.	Rt. 180 East of 161	1,220	1,410	1,830	2,820	2,860	2,920	2,390	2,670	+119%	A
3.	Rt. 182 West of 161	2,720	2,530	3,550	5,230	5,540	7,960	9,270	12,030	+342%	A
4.	Rt. 182 East of 161	2,180	2,390	3,690	5,710	6,080	7,730	9,250	11,130	+411%	A
5.	Rt. 161	1,500	1,920	2,450	3,370	3,680	4,490	5,820	6,400	+327%	A
6.	Rt. 182 at Florida State line	N/A	N/A	N/A	N/A	4,450	5,420	7,290	8,400	+89%*	A

* *1986-1992*

Source: Alabama Department of Transportation

TABLE 28

MATS MODEL CAPACITIES BY FUNCTIONAL CLASS
AVERAGE DAILY TRAFFIC, BOTH DIRECTIONS

	LOS	Arterial					LOS
		Collector	Minor	Principal	Expressway	Freeway	
Two-lane	A	6,000	8,000	9,400			A
	B	7,000	9,400	10,900			B
	C	8,000	10,700	12,500			C
	D	9,000	12,000	14,000			D
	E	10,000	13,300	15,500			E
Two-lane with turn	A	6,700	8,700	10,100			A
	B	7,800	10,100	11,700			B
	C	8,900	11,600	13,400			C
	D	10,000	13,000	15,000			D
	E	11,100	14,400	16,700			E
Four-lane	A	12,100	16,100	18,800			A
	B	14,000	18,700	21,800			B
	C	16,000	21,400	24,900			C
	D	18,000	24,000	28,000			D
	E	20,000	26,600	31,100			E
Four-lane divided	A	14,100	18,800	22,100	29,500	37,500	A
	B	16,400	21,800	25,700	34,300	43,700	B
	C	18,700	24,900	29,400	39,200	49,800	C
	D	21,000	28,000	33,000	44,000	56,000	D
	E	23,300	31,100	36,600	48,800	62,200	E
Six-lane divided	A		26,800	31,500	44,200	56,300	A
	B		31,200	36,700	51,500	65,500	B
	C		35,600	41,800	58,700	74,800	C
	D		40,000	47,000	66,000	84,000	D
	E		44,000	52,200	73,300	93,200	E
Eight-lane divided	A		40,900	59,000	75,000	A	
	B		47,600	68,600	87,400	B	
	C		54,300	78,300	99,700	C	
	D		61,000	88,000	112,000	D	
	E		67,700	97,700	124,300	E	

Source: Mobile Area Transportation Study

Location of Accidents

Shown in Table 29 are the locations where accidents occurred which represent not less than 5 percent the total number of accidents in the City in 1994.

TABLE 29

ACCIDENT LOCATION REPRESENTING 5 PERCENT OF THE TOTAL NUMBER OF ACCIDENTS 1994

Location	Percent	Existing Signalization
Orange Beach Blvd. and Garrett Lane	3.06	No
Canal Road and Orange Beach Blvd.	7.14	Yes*
Perdido Beach Blvd. and Orange Beach Blvd.	15.3	Yes

** Signalization has been approved for this intersection.*

Source: Orange Beach Police Department

Summary

Major Arterial - Alabama Hwy. 182 is the only major arterial and travels along the beach. Its capacity meets the current and future demand. Consideration of limiting any type of high-density residential development may be a factor which helps the transportation network, particularly Alabama Hwy. 182, to continue to operate at a desirable LOS.

Minor Arterial - Alabama Hwy. 161, the sole north-south minor arterial, provides primary access to the commercial, residential and public land uses. The LOS A along this roadway could decline to LOS B if more development occurs.

The location selected for the additional north-south access will impact the transportation network, reducing traffic on parallel north-south routes and also possibly reducing traffic on Alabama Hwy. 180. It also will improve accessibility within Orange Beach and could promote more commercial development, if zoning conforms. The difficulty with providing an additional north-south access in the likelihood that the location would be in the Gulf State Park. This area is highly sensitive and a valuable natural and environmental resource.

Collector Streets - Alabama Hwy. 180 is a collector street serving both Orange Beach and Gulf Shores. East of Alabama Hwy. 161 it serves as the sole route extending to Bear Point and the northern peninsula of Orange Beach, abutting various types of residential land uses. West of Alabama Hwy. 161, it serves as the main northern street of Orange Beach and is primary access for commercial land use, connecting up to Alabama Hwy. 59. With future development, it is anticipated that the present LOS A for both segments will decline to a LOS B for the western segment of Alabama Hwy. 180.

Local Streets - Local streets serve residential areas and vary in condition from paved, adequately lit and well-drained to unpaved, unlit and lacking drainage ditches. The construction and paving of unpaved roadways and corresponding drainage improvements is the primary need of Orange Beach's local streets.

Sidewalks - Presently, the City's Subdivision Regulations address standards and conditions if sidewalks are installed.

Bike Paths - There are currently no provisions for bike paths in the subdivision regulations. Alabama Hwy. 182 has a bike path in Gulf Shores, which ends at the corporate limits of Orange Beach.

Future Transportation Network - The future transportation network can be seen in Figure 8.

With Orange Beach continuing to be an ever-increasing resort destination, transportation deficiencies will continue to plague the City. Armed with this determination the City has chosen to emphasize **DESTINATION**. Therefore, all improvements to the transportation network will promote a pedestrian-oriented lifestyle, while lessening dependency on the automobile. The following recommendations are designed to accomplish this.

Recommendations

- Convert segments of Alabama Hwy. 182, the main tourist area's arterial thoroughfare, to an aesthetically-improved, collector-level boulevard. (This will also aid in establishing a Town Center.) The converted portion will span a distance beginning at the western edge of the City to its intersection with Alabama Hwy. 161, at which point the improved portion will generally follow Alabama Hwy. 161 to a point perpendicular to the center of City Hall. Improvements will encompass a median, on-street parking, tree-lined sidewalks and reduced speed limits.

- Use highway right-of-way, of 180 east of 161 to install bike paths and landscaping adjacent to, but separate from, the pavement to facilitate bike and pedestrian traffic from this neighborhood to Alabama Hwy. 161 (the Town Center).
- The area located west of Alabama Hwy. 161, south of Wolf Bay and north of the State Park to the west corporate limits is the least developed of all the areas in Orange Beach. This area should be developed using classic Traditional Neighborhood Design. The streets should be developed using grid patterns and limiting the use of cul-de-sacs. Each development is intended to connect with future or existing adjacent developments.
- Develop a multi-modal transportation master plan which includes non-motorized transportation.
- Minimize ingress/egress points along Alabama Hwy. 182.
- Coordinate with the City of Gulf Shores in the development of bike and pedestrian routes along Alabama Hwy. 182.
- Consider bike paths in all improvement projects to major roads.
- Establish land use controls that require sidewalks with any street improvement.
- Coordinate with the State and other transportation authorities (i.e., County, other municipalities) in the development of an additional north-south transportation corridor and evacuation route from Orange Beach.
- Develop a local transportation improvement program which includes pavement and drainage improvements.
- Replace street lights to pedestrian-scale street lights and install additional street lights as needed.
- Develop a sidewalk master plan as a component of the transportation improvement program.

- Coordinate with the State regarding through access from the State Park to the Orange Beach Post Office by way of Cat Man Road.

- Coordinate with the state for north-south access through the State Park.

- Reclassify portions of Alabama Hwy. 182 and 161 from Major Arterial and Minor Arterial, respectively, to Collector as shown on the Future Transportation Map.

- Coordinate with the State Highway Department to:

    * Lower the speed limit to 35 mph on Alabama Hwy. 182 from the west corporate limits to its intersection with Alabama Hwy. 61, continuing north along Hwy. 61 to the Town Center as described in this document.
    * Provide on-street parking
    * Provide a median
    * Provide sidewalks
    * Provide pedestrian crosswalks with lighted signals

- Provide for bike trails located within the right-of-way, but separate from the highway pavement.

- Require pedestrian-sized walkways and landscaping that encourages pedestrian mobility.

- Design a master street plan of the Northwest Orange Beach Neighborhood. Special attention should be given to the valuable resource designation on the Future Land Use Map.

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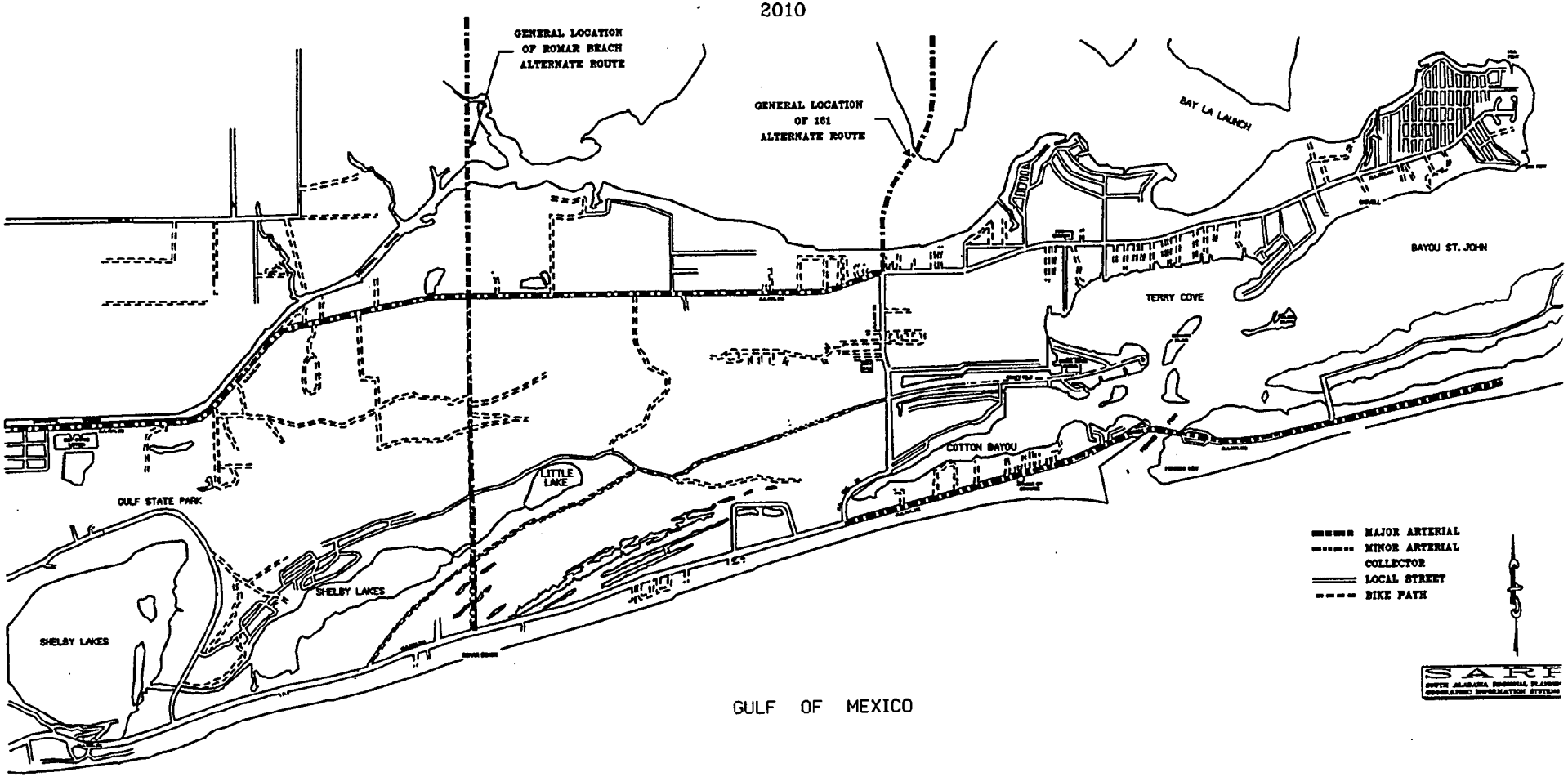
FIGURE 8
FUTURE TRANSPORTATION NETWORK
ORANGE BEACH
2010



page 2 of figure 8

COMMUNITY FACILITIES AND SERVICES

GOALS:

- **Provide adequate professional police protection.**
- **Provide adequate fire protection for all citizens of the City.**
- **Provide adequate radio communication for all City departments.**
- **Provide educational opportunities for elementary-aged school children within the corporate limits of Orange Beach.**
- **Provide adequate recreation facilities, both active and passive, and open space areas for all citizens of Orange Beach through a combination of public and private facilities.**

Police Protection

Inventory and Analysis

The Police Department is administered by a Chief who is responsible to the City Administrator. Funds for the department are budgeted annually by the City Council on the basis of estimates prepared by the Chief and police staff. The Police Department operated with a $850,901.80 budget for FY 1994 and is operating with a budget of $875,167.00 for FY 1995. Municipal court revenues for 1994 were $211,691.21 and the 1995 revenues to date (February 22, 1995) were $23,041.02.

Current Police Department personnel include 15 full-time sworn officers, 2 part-time sworn officers, 10 reserve (non-sworn) volunteer officers, one secretary, four dispatchers and one animal control officer.

The estimated 1992 year-round population for Orange Beach is 2,424. The average population, including seasonal, for 1994 was 9,778, with a peak seasonal population of 13,388. The City is in keeping with the national norm of 2.1 officers per 1,000 population. The need for additional department personnel should be reviewed annually to ensure compliance with the national norm.

Table 30 illustrates the Police Department's activities for the year 1994.

The Police Department has 8 marked patrol units and 4 unmarked units. The average miles on the marked patrol units is 80,000 (for 5 units which are 1992 models) and 28,500 (for 3 units which are 1993 models). The marked units are in satisfactory condition. Most of the 1992 models will need to be replaced starting in FY 1996. The unmarked vehicles are in satisfactory condition at the present time. It is the policy of the department to replace these vehicles with patrol fleet vehicles having high mileage.

The department's radio communication system operates on VHF in the 155 MHz range. The system provides police, EMS and fire dispatch as well as dispatch for the State Marine Police stationed in Orange Beach. The 155 MHZ band is crowded nationwide, and this hinders the City's communication ability. There are several dead spots within the City where radio communication is nearly impossible. The equipment is old and repairs are frequently needed. Radio and telephone traffic is recorded using a Dictaphone system. This system is approximately eight years old and also needs frequent repairs. This system is operating at maximum capacity.

The Police Department's phone system is adequate with enough incoming and outgoing lines and two dedicated 911 lines.

The computer system is new and fulfills the department's current needs.

TABLE 30

POLICE INFORMATION SUMMARY 1994

Calls for Service	9,617
Sworn Officers	
Full-time	15-17
Part-time	2
Crimes	
Total	5,755
Homicide	5
Rape	4
Robbery	4
Assault	35
Violent Crimes	50
Burglary	426
Theft	238
Larceny	11
Vehicle Theft	13
Traffic Related	4,980
Accidents	
Total	98
Serious Injury or Fatality Accidents	41
Adults Jailed	491

Source: Orange Beach Police Department

The Police Department building, built in 1988, was designed to house a minimally-sized department. The offices are small and crowded. The jail space is filled to capacity most of the time. The City of Orange Beach does not respond to calls outside of the corporate limits. By law, the City is able to exercise a police jurisdiction extending 1.5 miles beyond the City limits. There is currently some question about the exact location of the City's police jurisdiction.

Fire Protection

Facilities and Personnel

The City of Orange Beach has five fire houses. Currently, there are 26 volunteer fire fighters and 12 paid fire fighters. Seven of the paid fire fighters are full-time, with 5 fire fighters being part-time. Part-time fire fighters work when the full-time personnel are on vacation, sick leave, or off. They are also called upon for extra personnel to man extra equipment on busy holidays. Table 31 gives an inventory of the stations and equipment.

Station #1 has two paid personnel per day. The fire chiefs's office is located here, along with the inspector's office. The rest of the stations are volunteer stations and are not manned full time.

TABLE 31

FIRE DEPARTMENT INVENTORY
ORANGE BEACH
1995

Station	Address	Equipment Type - Description
1		1 - 1994 GMC ALS Rescue Unit
		1 - 1984 Ford Reserve ALS Rescue Unit
(Main Station and Headquarters)	25853 John Snook Dr.	1 - 1992 KME 1250 GPM Pumper
		1 - 1974 Ward LaFrance 100 ft. aerial ladder
		1 - 1977 Dodge Brush Truck (woods fires)
		1 - 1984 GMC Service Truck
		1 - 1986 Dodge Reserve Car
		2 - 1994 Wave Runners
		1 - 1992 Ford Explorer (chief car)
2	27203 Canal Rd.	1 - 1988 Ford E-1 1250 GPM Pumper
3	29422 Canal Rd. (Bear Point)	1 - 1975 Hahn 1000 GPM Pumper
4	Ono Blvd.	1 - 1987 Ford Grummen 1250 GPM Pumper
5	3365 Orange Beach Blvd. (Cotton Bayou)	1 - 1984 Ford Tanker 2000 gallons

Source: Orange Beach Fire Department

Performance

During fiscal year 1993-1994, the Orange Beach Fire Department was called upon 936 times. Fire losses were estimated at $500,000. Table 32 shows Fire Department activities for the last 10 years.

The Fire Department takes fire calls and EMS calls in Orange Beach and on Ono Island. Response time to the scene of a fire using only duty personnel (the Department has 2 paid personnel working each shift) is estimated to be 3 to 5 minutes. Volunteers are paged for each fire call and their response time extends from to 13 to 15 minutes. Based on requirements of OSHA and NFPA, personnel are not allowed to enter a house fire with less than 4 fire fighters. This results in waiting for volunteer personnel to arrive before combating a fire. During the past year, two or more calls at the same time occurred 6 times. Of the 118 calls between May 3, 1993 and February 1995 in which the ladder truck was needed, it was only able to respond to 59 calls. This left 59 calls not responded to due to lack of personnel. The same situation results when there are two or more EMS calls. Personnel is limited to respond to only one call.

Figure 9 shows existing station locations, except the station located on Ono Island, and proposed needed station locations by the year 2005.

The City has a mutual aid agreement with the City of Gulf Shores and Innerarity Point, Florida. Should a fire occur in any of these communities and overwhelm that area's fire suppression resources, the other communities will provide assistance. The effectiveness of this agreement may be diluted in the event of out-of-town forces being diverted to their own local emergency.

Fire Rating

The City possesses a class seven fire rating. The fire rating is tied to certain performance standards and criteria, such as the number and placement of fire hydrants, number and manning of fire houses, and number and type of apparatus, public alarm systems, etc.

TABLE 32

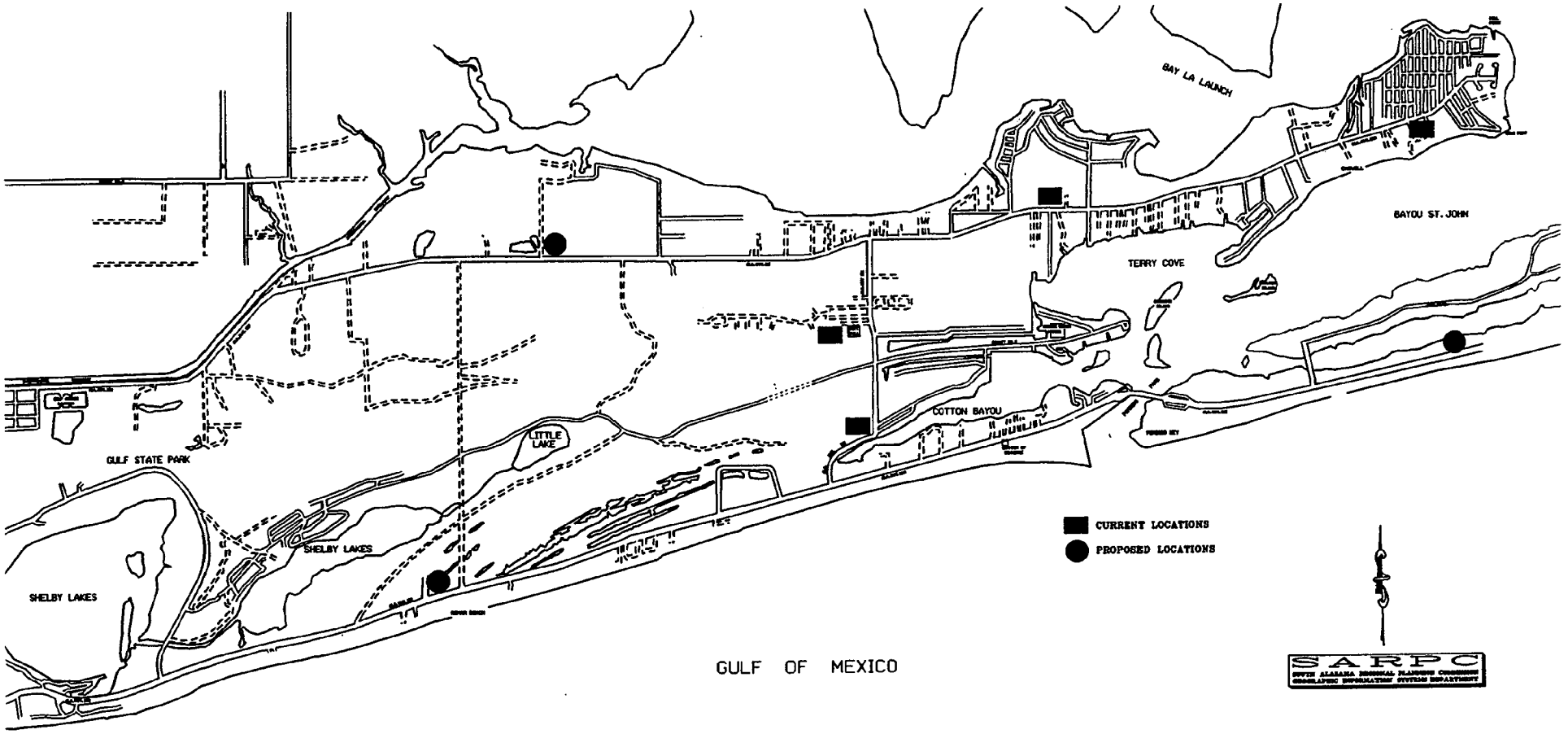
TEN-YEAR FIRE DEPARTMENT ACTIVITY
CITY OF ORANGE BEACH
FY 1984 - FY 1994

FISCAL YEAR	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989	1989-1990	1990-1991	1991-1992	1992-1993	1993-1994
FIRE CALLS	17	58	51	46	64	87	116	104	206	282
RESCUE	66	139	221	259	349	363	281	369	483	628
HAZARDOUS CONDITIONS									11	10
GOOD INTENT									9	6
FALSE CALLS									5	10
TOTAL FIRE CALLS	83	197	272	305	413	450	397	473	714	936
DOLLAR LOSS									200,000	500,000
FIRE INJURIES - Civilian	0	0	0	0	0	0	0	1	0	1
- Firefighter	0	0	0	0	0	0	0	0	0	2
FIRE FATALITIES - Civilian								1	0	1
- Firefighter								0	0	0

Source: Orange Beach Fire Department

** Until mid-1992, the Fire Department was completely volunteer and records were limited.*

FIGURE 9
FIRE STATIONS
ORANGE BEACH
1995



2nd page - fire station

Schools

The residents of Orange Beach are served by the Baldwin County Board of Education. All students residing in Orange Beach are forced to seek educational attainment outside the corporate limits of Orange Beach. Very young children travel from Orange Beach to Gulf Shores for grades K - 8th grade. In 1993, the number of children in grades K - 5 traveling to Gulf Shores or Foley was 146. Currently that number is 174, an 8.4 percent increase in 2 years.

Listed in Table 33 are disaggregate population projections for school-age children in Orange Beach from 1990-2020. Recently a site for an elementary school has been acquired with construction to be completed in late 1996. The new school will have a capacity for 500 students in grades K - 5.

TABLE 33

**DISAGGREGATE POPULATION PROJECTION*
CITY OF ORANGE BEACH**

	1990	2000	2010	2020
Elementary	91	99	122	148
(5 to 9 years)	4.0%	3.6%	3.4%	3.3%
Middle	81	88	108	126
(10 to 14 years)	3.6	3.2%	3.0%	2.8%
Junior/Senior High	111	132	166	198
(15 to 19 years)	4.9%	4.8%	4.6%	4.4%

Source: South Alabama Regional Planning Commission, 1994

* *Since no historic data by age group is available for Orange Beach, it was assumed that, due to its location on Pleasure Island contiguous to Gulf Shores and sharing the same Gulf Coast attractiveness and environmental assets as Gulf Shores, Orange Beach would have age group characteristics similar to those of Gulf Shores, which were used in deriving the rates in this table for application to the Orange Beach population projections for 2000, 2010 and 2020 in order to obtain the above projections by age group for Orange Beach.*

Library

The City of Orange Beach adopted an ordinance creating the City Library on February 3, 1992. It was recently moved from its location in the City Hall Complex to the building recently vacated by the City Post Office which is adjacent to City Hall.

The library is open 48 hours a week and is staffed by 1 full-time and 2 part-time employees, which equals 2.6 full-time employees. Between the three staff members, there are three bachelor's degrees, two master's degrees and one master's degree in progress. The government and supervision of the City Library is vested in the Library Board.

The Library has 11,000 volumes with the 1994 annual circulation in 1994 of 23,044. In February 1995, the library had 2,170 patrons. The number of people visiting the library per week during peak season (December 1 through March 30) is estimated to be 1,200. The number of people visiting the library per week during the off-season is estimated at 450. The materials budget for FY 1994-1995 is $22,000.

Listed below is the current 1996 situation, current need and the projected need of the library.

Volumes	Shelving Capacity:	8,000
	Needed in Next 5 Years:	30,000
	Needed in Next 10 Years:	50,000
	Volumes in 1994:	8,755
	Projected for next 5 years:	25,000
Staff	Current	2.6 Full-time employees
	Needed in next 5 years:	4.0 Full-time employees
People visiting the library per week, peak season:		1,200
People visiting the library per week, not peak season:		450
Reference questions answered in 1994:		6,254
Reference questions answered in 1993:		1,721
Current square footage:		3,500
Currently needed:		6,000
Needed in 5 years:		15,000
Needed in 10 years:		25,000

It should be noted here that the expected move to the post office building did not provide the needed space necessary for the library. The library suffers from a unique dilemma. Funds are available for needed materials (i.e., additional volumes and equipment), but the space needed to accommodate these improvements is limited. Therefore, improvements may or may not occur due to space limitations.

Services Provided by the Library

Books
Books on Tape
Large Print Books
Videotapes
Magazines and Newspapers
Reference Services
Interlibrary Loan Service
Word Processing Workstation
Computerized Card Catalog
Magazine Give & Take Box
Multi-Media Encyclopedia on CD-ROM
National Telephone Directories on CD-ROM
State and Income Tax Forms and Brochures
Reading Discussion Group
Children's Summer Story Hour
Children's Summer Reading Program
Photocopying
Access to *Dialog* Online Service
Bulletin Board for Community Announcements
Readers' Advisory Services
Community Information and Referral File
Display Point for Local Artists' Work
Full-Text Magazine and Newspaper Articles on CD-ROM
Downloadable Computer Programs (Freeware & Shareware) on CD-ROM

The City's Library Board has developed goals to be achieved by the year 2000. They are:

Goal 1: Provide materials and services to meet the informational needs of area residents and visitors.
Goal 2: Provide materials and services to meet educational needs.
Goal 3: Provide materials for recreational use.
Goal 4: Meet special needs of our community.
Goal 5: Create and maintain progressive library environment.

Recreation

The purpose of this section is to assess current opportunities and to analyze future needs to enhance the system of recreation and open space. Table 34 shows the City-owned recreational facilities available to the population..

TABLE 34

CITY-OWNED RECREATIONAL FACILITIES

Site	Acreage	Location	Equipment
City Hall Complex	N/A	City Hall	Swing set, merry-go-round, slide, 2 monkey bar climbers, tire swing, toddler swing, 2 spring rocking animals and 2 sets of horse shoes
James D. Snell Park	7 acres	27235 Canal Rd.	Swing set, see-saw tetherball pole, 2 slides, 2 tire swings, monkey bar set and spring board bouncer, 4 fields (1 t-ball, 2 little league and 1 adult), 2 basketball courts, swimming pool, museum, recreation center, community center
Bear Point Park	2.3 acres	Next to Bear Point Marina	Swing set, 2 spring rocking animals, see-saw, 1 metal square climber and 1 stub for a merry-go-round (which is missing)
Harrison Park	.6 acres	End of Park Dr. in East Orange Beach Subdivision	No equipment

Source: City of Orange Beach

Also available to the residents of Orange Beach are the numerous bayous for water sports and Gulf State Park for recreational purposes.

It is important that recreation facilities be easily accessible to residents, equally distributed throughout the City, and provide adequate access. The City should monitor needs of special groups, especially the elderly. The City owns a parcel containing 588 acres. The City should evaluate the need for a regional park using part of these 588 acres.

Recommendations:

- Evaluate and provide new communication system/equipment for the police and fire department.
- Provide additional fire stations to service the entire City.
- Coordinate with the Baldwin County School Board and provide a public school in Orange Beach for K through 8th grade.
- Evaluate space needs of the library and provide plans to accommodate current and projected population.
- Acquire beachfront property.
- Develop a study to assess the recreational needs of the residents.
- Acquire boat ramps for public use (possibly Harrison Park).
- Coordinate with the state and open access from Gulf Shores for non-motorized traffic from the State Park to the Orange Beach Post Office. Locate fitness stations along the accessway.
- Develop portion of City-owned 588 acres for Regional Park.

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UTILITIES

GOALS:	•	**Coordinate with the Sanitary Sewer Department and the Orange Beach Water, Sewer and Fire Protection Authority to establish a plan to ensure that existing and projected needs and demands are identified and provided for.**
	•	**Provide adequate storm water management including reasonable protection from flooding, protection of the quality of receiving water and protection of investments in existing facilities.**
	•	**Provide for mandatory solid waste disposal.**

Water

Service Area

Water and fire protection service is supplied to approximately 23,000 Residential Customers and 100 Non Residential Customers through the Orange Beach Water, Sewer & Fire Protection Authority. Recently Ono Island's service area and facilities have been incorporated into Orange Beach's, adding 600 new users to the system. Only 2.5 percent of the housing units in Orange Beach had individual drilled wells and 0.1 percent were served with water from some other source. Existing water lines are shown in Figure 10.

Distribution System

There are three elevated tanks and one stand pipe storage facility in Orange Beach and one 250,000 elevated tank on Ono Island, having a total storage capacity of 2.65 million gallons. Five wells provide the potable 4,304,000 gallons per day water source and its treatment, consisting of Cl_2, fluoride, lime, zinc and orthophosphate, occurs at each well. Generally, 1.426 millions of gallons are used daily, with peak daily usage totaling 1.856 million gallons. The usage is well below the total system's capacity. The system's average pressure is 60 psi with 42 psi being the low.

Future Improvements

Future improvements will be to improve the pressure throughout the system, to meet future growth and provide adequate fire protection.

Sanitary Sewer

The City until recently did not own, operate or maintain any wastewater treatment facilities, nor did it have control over any sewerage system. Island Bay Utilities, Inc., a private company headquartered in Gulf Shores, had a non-exclusive franchise for wastewater collection within the City's corporate limits. The City of Orange Beach recently purchased the Island Bay facility. The City of Orange Beach Water Reclamation System operates the combination gravity and pressure sewer system within the City. The treatment consists of modified activated sludge-final filtration and UV disinfection. It has an existing capacity of 1.6 MGD and an existing demand of .01 - 2.2 MGD, at peak flow rate. The treatment facility is located adjacent to Alabama Highway 180.

Effluent disposal is into the Intracoastal Canal. No problems were cited in the Bladwin County Waste Water Treatment Planning Report Survey. As population grows, the facility has adequate land for expansion. Last summer the City experienced serious deficiencies regarding the sanitary sewer peak flow rate. The City currently has an agreement with Gulf Shores to pump excess sewage from Orange Beach to the Fort Morgan Sewage Plant.

The sewer system has 12 miles of gravity mains and 60 miles of force mains, totaling 72 miles of lines. Mains range in size from 6 inches to 12 inches; force mains are 8 to 12 inches typically. There are 24 pumping stations. Existing sewer lines are shown in Figure 10.

Connection to the newly-acquired collections system is not mandatory by City residents. The Baldwin County Health Department continues to certify the installation of septic tanks within the City. With 4,300 service connections, the system serves approximately 1,462 customers including 400 non-residential users. In 1990, the U.S. Census reported that 60.2 percent of the total housing units were utilizing public sewer, 39.5 percent utilized a septic tank or cesspool and 0.3 percent disposed of sewage by other means.

Future Improvements

Improvement plans for the system were recently developed and approved by the City Council.

They are as follows:

- Upgrade the plant's capacity from 1.2 million gallons per day tp 1.5 million gallons per day.
- Add an additional tank at a later date.
- Build a plant capable of handling 3 million gallons a day, and later a tank that can hold 3 million gallons a day.
- Apply $400,000 to upgrade mechanical and electrical equipment.

Gas System

The City has signed a franchise agreement with Clark Mobil Gas to provide natural gas service to its residents. Construction of the gas lines will occur when 1,000 customers have committed to this service.

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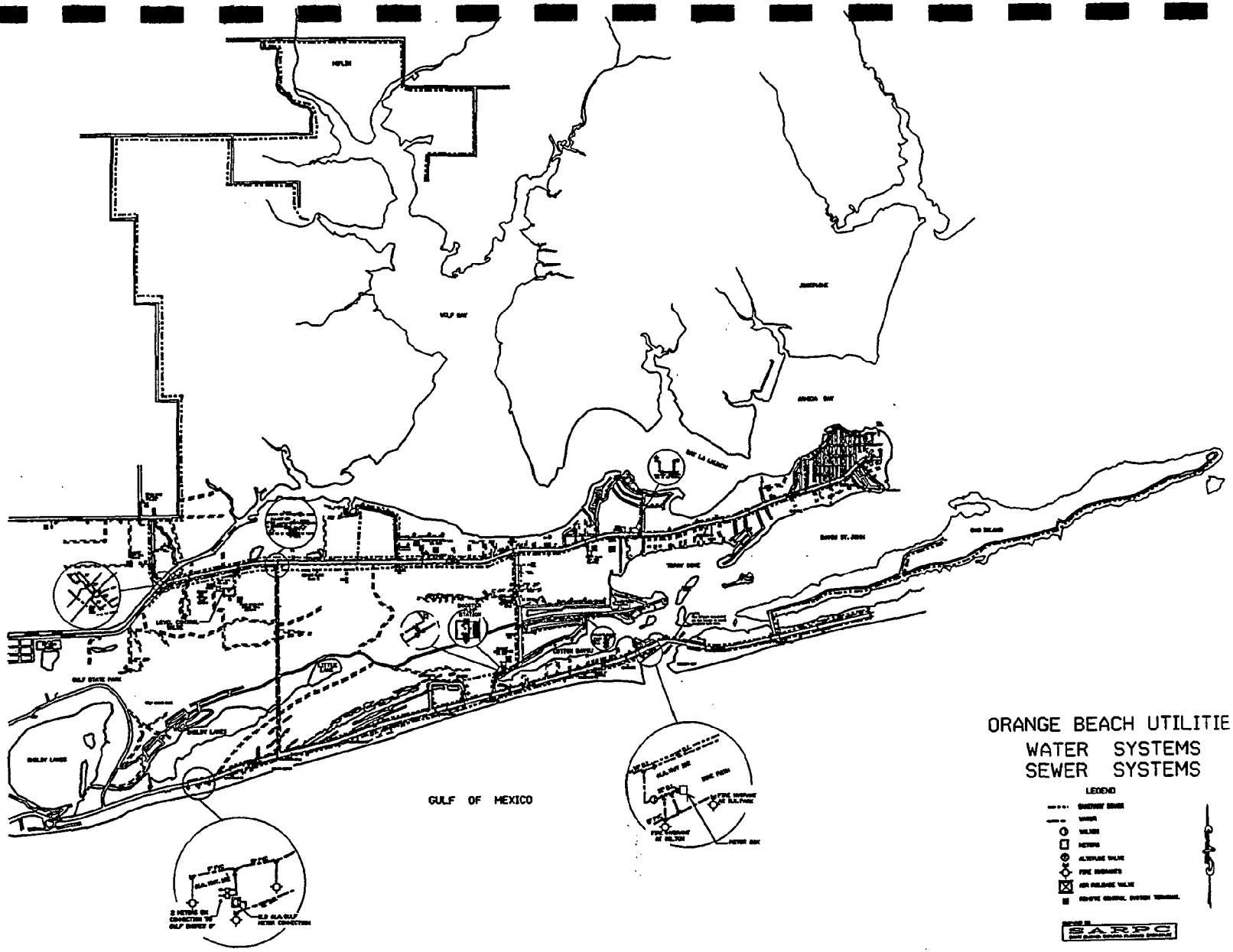
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ORANGE BEACH UTILITIE
WATER SYSTEMS
SEWER SYSTEMS
LEGEND
BARPC

page 2 of figure 10

Drainage

Drainage in this environmentally-sensitive City is a critical issue. The natural drainage has been impacted by development of street, residential and commercial activities. To compensate for the interruption of the natural flow, man-made drainage ditches have been installed.

The terrain varies from thirty-foot-high drylands to coastal marshlands and tidal flats. Hydric soils, which support the plant and animal life of wetlands, abound and these provide natural drainage. The shorelines are prone to erosion and marshlands and wetlands are prone to silting and disruption from adjacent development. Bear Point is the primary area for drainage problems. The City recently completed an extensive street and drainage improvement project in this area. The West Perdido Avenue area also experiences drainage problems.

Existing Conditions

At the present time, the City does not have an overall drainage or stormwater master plan. Drainage projects are usually associated with subdivisions, shopping centers or road projects.

Projects are recommended by the Public Works Department on an annual basis. Other projects are determined by the City Council on an as-needed basis.

Currently, the majority of State, County and City roads, as well as the newer residential and commercial developments, have drainage control facilities. However, other areas of the City are lacking adequate drainage.

Solid Waste Management

Solid Waste Disposal

The City of Orange Beach does not have a mandatory ordinance for solid waste disposal, but rather residences are serve on an individual basis. Franchise agreements exist between the City and two independent contractors (BFI and Waste Management), enabling the residents to subscribe to whichever company they choose. Also, they may opt for neither. The City does pick up yard trash.

Table 35 indicates the estimated solid waste generated by Baldwin County and its municipalities for the year 2010.

Disposal Facilities

The Magnolia Sanitary Landfill is the only sanitary landfill in Baldwin County and was opened in 1972. In 1980, operational plans were required and were revised in 1984. Under Alabama Department of Environmental Management's (ADEM) regulation, the operational plan is still current and acceptable practices are followed.

Hazardous Waste

Hazardous waste is monitored by ADEM. All households are exempt from ADEM regulation. Businesses are responsible for their own waste and should contact ADEM if there is any question as to whether or not the business may be generating hazardous waste. ADEM will then make a determination if hazardous waste is being generated.

Recycling

As part of the solid waste disposal service with BFI or Waste Management, curbside co-mingle recycling is included.

TABLE 35

ESTIMATED SOLID WASTE GENERATED
BALDWIN COUNTY MUNICIPALITIES
2010

Place	Estimated [1] Population	Cubic [3] Lbs/Day [2]	Yds/Day	Projected Solid Waste Generated Tons/Day [4]
Bay Minette	13,883	62,473	83	31
Daphne	19,871	89,420	119	45
Elberta	966	4,247	6	2
Fairhope	14,486	65,187	87	33
Foley	7,545	33,952	45	17
Gulf Shores	4,195	18,878	25	9
Loxley	1,418	6,381	9	3
Orange Beach	3,199	14,396	19	7
Robertsdale	4,074	18,333	24	9
Silverhill	1,056	4,279	6	2
Spanish Fort	N/A	N/A	N/A	N/A
Summerdale	951	4,279	6	2
Balance of County	77,727	349,772	466	176
TOTAL	149,371	672,170	895	336

[1] *South Alabama Regional Planning Commission projections*
[2] *South Alabama Regional Planning Commission based on 4.5 lbs. per person per day*
[3] *Based on 750 lbs. per cubic yard*
[4] *Based on 2,000 lbs. per ton*

Source: South Alabama Regional Solid Waste Management Needs Assessment, Baldwin, Escambia and Mobile Counties, Alabama, December 1989; South Alabama Regional Planning Commission, 1992

The Baldwin County Comprehensive Solid Waste Management Plan cites goals to be achieved through and by the year 2000. These goals are designed to meet the requirements of Act 89-824 of the Alabama Legislature.

1. Achieve or exceed a 25 percent recycling rate by the end of 1994.

2. Provide for a minimum of ten years landfill disposal capacity.

3. Provide convenient and economical recycling opportunities for each individual and business.

4. Eliminate unauthorized open dumps and clean up the ones now in existence.

5. Eliminate and control litter.

6. Initiate full cost accounting of solid waste collection and disposal.

7. Assure that the public has the opportunity throughout the planning process to be a part of the solution to our solid waste dilemma. Therefore, source separation of waste will be initiated.

Telephone

Gulf Telephone is the only local telephone service provider serving 38,000 South Baldwin County customers, encompassing Orange Beach, Foley, Gulf Shores, Robertsdale and the unincorporated areas south of I-10, west of Fish River and east of Perdido Bay. There are 3,147 telephone numbers at Orange Beach and 711 at Bear Point.

Recommendations

- Coordinate the Water Authorities Long-Range Plan to Capital Improvements Programs.
- Coordinate Sanitary Sewer Long-Range Plans to Capital Improvements Programs.
- Establish a system to ensure Water, Sewer and Fire Protection is provided for each proposed development.
- Require connection to sanitary sewer if connection service line is available.
- Provide mandatory garbage pick-up.
- Locally adopt the goals to meet the requirements of Act 89-824 of the Alabama Legislature.